



EMRA and CORD

# Student Advising Guide

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Please be aware: We have cited NRMP Charting Outcomes in multiple chapters, along with AAMC resources. NRMP, AAMC, and the authors have attempted to produce unbiased and, where available, evidence-based information and advice regarding matching and competitiveness. However, there are no perfect studies available to give us the best evidence. We have used the best information available, and caveats are present. In this guide, we reference matched and unmatched candidates; it should be noted that a matched candidate indicates a candidate who matched into a preferred specialty. An unmatched candidate did not match into the preferred specialty, but did not necessarily not match into residency at all.

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# Foreword

**The landscape of medical education is changing.** Core clerkships for many schools becoming pass/fail, the downfall of the Standardized Video Interview, the COVID-19 pandemic, USMLE Step 1 and COMLEX Level 1 becoming pass/fail, program signals and geographic preferences being added to the application, an increase in the number of emergency medicine residency programs, and a significant number of EM positions being open in the SOAP — these are just some of the changes that have occurred to the EM residency application process since the first collaboration of the EMRA and CORD Student Advising Guide was published in 2019.

During these times of change, one thing remains constant and true — **EMRA is here for you.**

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*Our authors are expert EM advisors, and our goal throughout this guide is to bring you evidence-based advice to help you position yourself for success.*

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Throughout this guide, we want to continue to help you apply smarter, not harder. Our chapter authors are expert EM advisors, and our goal throughout this guide is to bring you evidence-based advice to help you position yourself for success.

Each chapter walks you through building a solid foundation throughout your preclinical and clinical years of medical school, succeeding on away rotations in EM, applying to residency, interviewing, and matching into EM.

We will help demystify the eSLOE, program signaling, geographic preferences, and how the NRMP Match algorithm works.

We will walk you through the NRMP Match data so you can be better informed on your likelihood of matching based on the number of programs you have on your rank list — you can then use this as a guide to help you better understand how many programs you should apply to in the first place.

**Again, let us help you apply smarter, not harder.**

We have also included targeted tips for osteopathic, IMG/FMG, military, and at-risk students, as well as those who are dual applying or couples matching. If you are a latecomer to EM, we have tips on how to quickly set yourself up for a successful match.

We hope this guide will help to make the process of matching into EM less daunting — from day one of medical school to Match Day.

If you haven't heard this yet, you will hear it often: EM is a team environment. That is true of this book as well; we couldn't have done it alone, and we want to share our gratitude.

- **Thank you to our collaborators from CORD**, who work so hard to support trainees on- and off-shift.
- **Thank you to our chapter teams**, who worked seamlessly to make sure this edition is current and helpful. They built on the words and wisdom of our previous edition, and we offer our thanks to those authors as well.
- **Thank you to our medical student reviewers**, whose input helped ensure our guidance is clear and thorough.

As always, we are here for you! If you have questions, please reach out.

**Erin Karl, MD, MEHP**

Editor-in-Chief



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# Glossary of Abbreviations

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|---|
| AAEM — American Academy of Emergency Medicine   |
| AAMC — Association of American Medical Colleges   |
| ABEM — American Board of Emergency Medicine   |
| ABMS — American Board of Medical Specialties  |
| ACEP — American College of Emergency Physicians   |
| ACGME — Accreditation Council for Graduate Medical Education  |
| ACOEP-RSO — American College of Osteopathic Emergency Physicians<br>Resident Student Organization                                       |
| AMA — American Medical Association  |
| AOA — Alpha Omega Alpha Honor Society or American Osteopathic Association   |
| APD — Associate/assistant program director  |
| ASC-EM — Advising Students Committee in Emergency Medicine  |
| CaRMS — Canadian Resident Matching Service  |
| COMLEX — Comprehensive Osteopathic Medical Licensing Examination  |
| CORD — Council of Residency Directors in Emergency Medicine   |
| CV — Curriculum Vitae   |
| DDx — Differential diagnosis  |
| ECFMG™ — Educational Commission for Foreign Medical Graduates   |
| ED — Emergency department   |
| EM — Emergency medicine   |
| EMIG — Emergency Medicine Interest Group  |
| EMRA — Emergency Medicine Residents' Association  |
| EMTALA — Emergency Medical Treatment and Labor Act  |
| ERAS® — Electronic Residency Application Service  |
| eSLOE — Electronic Standardized Letter of Evaluation  |
| IMG — International medical graduate  |
| LoR — Letter of Recommendation  |
| MODS — Medical Operational Data System  |
| MSPE — Medical Student Performance Evaluation   |
| NBME — National Board of Medical Examiners  |
| NCAT-EM — National Clinical Assessment Tool for Medical Students in EM  |
| NPP — Non-physician provider  |
| NRMP — National Resident Matching Program   |
| OASIS — Online Applicant Status and Information Systems (for IMGs)  |
| O-SLOE — Off-service Standardized Letter Of Evaluation  |
| PD — Program Director(s)  |
| ResidencyCAS — Residency Centralized Application Service  |
| SAEM — Society of Academic Emergency Medicine   |
| SLOE — Standardized Letter Of Evaluation  |
| SOAP — Supplemental Offer and Acceptance Program  |
| Step 2 (CK) — USMLE Step 2 Clinical Knowledge exam<br>(Commonly referred to as simply Step 2, since Step 2 CS was discontinued in 2021) |
| USMLE — United States Medical Licensing Examination   |
| VSLO — Visiting Student Learning Opportunities  |

## COMMON SYNONYMS

Clerkship: away rotation, audition rotation, externship, sub-internship, sub-I



# Choosing Emergency Medicine

**Emergency physicians have the privilege of taking care of patients** and their families during the most vulnerable moments of their lives — simultaneously being the resuscitator, detective, team captain, coach, and metaphorical bartender. The breadth of skills and knowledge required to bring order to the chaos of the emergency department (ED) on a daily basis is what sets us apart and dictates which types of medical students will be successful and fulfilled by choosing emergency medicine (EM).<sup>1</sup>

## A Brief History of Emergency Medicine

To understand the practice of EM today — and the nearly 300 EM residency programs that now exist — it helps to understand how EM has evolved as a specialty. Post-World War II, America experienced a tremendous period of prosperity including a quadrupling in the number of automobiles, 41,000 miles of new highways, and the development of suburbs. This new mobility, coupled with increasing specialization in medicine, separated many patients from the family physicians that traditionally cared for them. In 1955, emergency “rooms” (which have since grown into “emergency departments”) were staffed by physicians from a wide variety of specialties who were not necessarily equipped with the specialized training required to treat the breadth of patients. The ED was labeled “the weakest link in the chain of hospital care.” The care provided to soldiers injured on the jungle battlefields of the Vietnam War was superior to the care received by many civilians in the United States.

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*The breadth of skills and knowledge required to thrive in the chaos of the ED on a daily basis is what sets us apart and dictates what type of medical student will be successful in EM.*

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**In 1966**, the National Academy of Sciences published “Accidental Death and Disability: The Neglected Disease of Modern Society,” which highlighted accidental injuries as the leading cause of death during the first half of one’s life, an epidemic problem with significant economic and human costs.<sup>2</sup> That same year, the National Traffic and Motor Vehicle Safety and Highway Safety Acts created mechanisms for the federal government to create new safety standards for automobiles, as well as the development of national standards for the implementation and advancement of pre-hospital EMS systems.

**Then in 1968**, John Wiegstein, MD, and a small group of physicians practicing in EDs came together to form the American College of Emergency Physicians. Membership was limited to those who “voluntarily devote a significant portion of their medical practice to emergency medicine and surgery.” Their goal was to organize the innovative trailblazers who were creating an entirely new way of delivering acute, unscheduled care across the country, determining the best ways to run and maintain viable EDs.<sup>3</sup>

**In 1970**, Bruce Janiak became the first emergency medicine resident at the University of Cincinnati, and by 1975, there were 31 EM residency programs. These pioneering residents took a chance pursuing training in emergency medicine, a specialty that was not yet officially recognized. In 1979, the American Board of Emergency Medicine achieved primary board status by the American Board of Medical Specialties, and EM officially became the 23rd medical specialty.

**In 1986**, the Emergency Medical Treatment and Labor Act became law. Before EMTALA, “patient dumping” was common in some communities, whereby poor, often critically ill patients were shifted from private to public hospitals, many times to the patient’s detriment. EMTALA requires all hospitals that accept Medicare to provide screening and treatment for emergency medical conditions, regardless of insurance status – and emergency physicians are happy to do this. As the safety net of our health care system, we provide more uncompensated care than any other medical specialty.

**Over the past several decades**, the number of patients visiting EDs has continued to steadily rise, while the number of inpatient beds has continued to shrink, leading to problems with ED crowding. The proportion of patients seen for trauma has declined thanks to injury prevention efforts, while the average age and complexity of patients seeking care for medical illnesses has increased. There is also an increasing number of patients seeking psychiatric care in the ED.<sup>3-5</sup> As increasing emphasis is placed upon the delivery of value-based care, EDs will continue to play a crucial role, given that a growing majority of hospital admissions originate from the ED.<sup>6</sup>

## What Makes Emergency Medicine Special?

- **Undifferentiated patients** — EDs have become the diagnostic centers for a growing majority of patients in today's health care system. Emergency physicians often are the first to assess a patient, and a broad differential diagnosis must be considered to ensure that the patient's symptoms are translated into an appropriate diagnosis.
- **Sick or not sick?** — From the doorway of a patient's room, emergency physicians must be able to quickly answer this question. They must always first consider the worst possible diagnoses for any given chief complaint, while also considering what is most probable or uncommon (and therefore likely to be missed). This differential is continually re-weighted as test results return and responses to treatment occur. This does not always lead to a clear diagnosis, but patients are risk-stratified, and the risk arising from dangerous diagnoses is diminished through this approach. While it may feel unsatisfying to discharge a patient with an unclear diagnosis (such as "abdominal pain of unclear cause"), sometimes the most dangerous thing a patient can have is a label of an uncertain diagnosis (such as "GERD" for unclear epigastric pain), since labels provided in the ED can strongly influence the care received after admission and during follow-up.
- **Quick rapport** — Emergency physicians must rapidly establish trust with patients and families they are meeting for the first time during times of vulnerability and uncertainty. It's been said that "people don't care how much you know until they know how much you care." This is not the time for complex physiologic discussions; it is the time to connect, show empathy, and help others feel at ease. You are the calm in the storm.
- **Critical decision-making** — The acuity of the ED requires you to make management decisions based on your clinical assessments, often without the benefit of complete information or diagnostic testing. A tolerance for chaos and uncertainty will serve you well. An emergency physician will make 10,000 implicit and explicit decisions in a shift.<sup>7</sup>
- **Multitasking** — This may be better described as "distracted decision-making" because emergency physicians need to rapidly shift their focus amid a variety of distractions — all without letting the quality of their decision-making be affected.
- **Teamwork** — Relationships within the ED and throughout the institution are crucial. Your character is the cornerstone of your ability to be the leader of a team. Your colleagues need to know they can count on you. Get comfortable trusting your instincts and your team. A successful

EM physician is able to appear in control and unflustered (even when panicking on the inside). They are able to calmly lead a resuscitation, listen to the input of the entire team, and prioritize the many necessary tasks and interventions. They inspire confidence within their own team and among the consulting services.

- **Procedures** — Emergency physicians must be experts at resuscitation and airway management, plus be skilled in a variety of other procedures ranging from basics like suturing and vascular access to lifesaving procedures like pericardiocentesis and thoracotomy. Some you will do every day, and others you will need to perform just once or twice in your career.
- **Safety net** — No patient is too poor, non-compliant, old/young, or pregnant to be seen in an ED. The ED is never closed, and we are never too busy, tired, or distracted to care for the patient in front of us. We take pride in the ability to care for those who cannot care for themselves, and we recognize and value the privilege of helping people on their worst days.
- **Episodic care** — For the most part, emergency physicians do not have the continuity of care common to many other specialties. We form very short, but important, patient relationships. The successful emergency physician gains fulfillment from even brief encounters.
- **Ever-changing** — Every day is different and unpredictable. You will be repeatedly challenged with new situations. Just as each day changes, EM is a specialty that continues to change. You grow and gain new skills, perform research to support decisions and care, and keep current with reading, skill acquisition, and practice.

## Work-Life Balance

ED shifts are a sprint, not a marathon. You will be at the hospital for a fixed amount of time, during which you will be working very hard. Then, you will go home to spend time doing the other things you love. Shifts in EM vary in length depending upon where you work, with 8- to 12-hour shifts being the most common. Some lower-volume EDs have shifts as long as 24 hours.

Emergency physicians work days, nights, weekends, and holidays; do not expect a 9–5, Monday–Friday schedule. In contrast, emergency physicians are not “on-call” like many other specialists, though you may be asked to cover a shift for a colleague in the event of illness or asked to come in during a disaster scenario.

Given the predictable, scheduled nature of their clinical shifts, emergency physicians have a great deal of flexibility in planning their schedules around important life events. Not having a practice where you are responsible for the ongoing care of a panel of patients also provides excellent career portability.

## Unique Challenges in Emergency Medicine

While EM is an overall fulfilling choice of specialty, it does come with its own set of emotional, mental, and physical challenges. These stresses come from the pressure to quickly evaluate, treat, counsel, and disposition patients while also being held accountable for meeting quality metrics and improving patient satisfaction — in a chaotic environment that can be worse when dealing with long wait times, patients suffering in pain, alarms ringing, and constant distractions. Emergency physicians must also cope with the physical effects of shift work, as their waking hours may frequently not follow a normal circadian rhythm.

In the ED, you will make life-saving decisions that may not always result in a good outcome. You will bear witness to terrible trauma and illnesses in both children and adults. You will gain firsthand knowledge of many tragic aspects of society that the majority of the population only hears about on the news, such as gun violence, child abuse, drug overdoses, elder neglect, suicide attempts, intimate partner violence, trafficking, and sexual assault. You will also see the short- and long-term consequences of poverty, housing insecurity, and substance use disorders. Debriefing after emotionally demanding interactions, reflecting upon events, and having a strong support system all help emergency physicians remain resilient.

## Burnout in EM

Although burnout is a serious risk in any medical specialty, a work environment with high demand and little control is more likely to lead to burnout. Maslach and Leiter define burnout as erosion within three critical areas: engagement, emotions, and fit. Erosion of engagement involves decreased energy and enthusiasm for medical practice.<sup>8</sup> Emotional erosion is defined as the transition to cynicism and bitterness. Finally, erosion of fit involves feelings of discomfort and a sense of isolation. With 65% of EM clinicians reporting symptoms of burnout, EM has the highest prevalence of burnout among all specialties.<sup>9,10</sup> In 2021, Congress began to take action, and in 2022 funds were earmarked for the mental health of America's health care workforce via H.R. 1667, the Dr. Lorna Breen Health Care Provider Protection Act.<sup>11</sup>

EM clinicians must learn how to recognize burnout in themselves and others and seek help. Fortunately, physician wellness and resiliency have become important priorities for residencies, EDs, and EM specialty organizations. Circadian schedules that match our natural forward rotation can reduce fatigue. Global systems changes can address increasing patient volumes. Personal measures that can be taken to prevent and ameliorate burnout include exercise, a healthy diet, strong social support, self-reflection, and mindfulness. It is also important for workplaces to offer the means of dealing with burnout symptoms. Employee assistance programs play an important role by allowing

physicians to self-report and get help, without their problems becoming public knowledge. Possessing varied interests, both personally and professionally, is protective against burnout.<sup>9</sup> Potential ideas in the professional realm include engaging in research projects, writing, and joining committees and other service organizations that help you foster a peer network. It is also important to maximize life outside the hospital by cultivating hobbies, traveling, and spending time with friends and family.

In a survey of residents across all specialties in 2018, 53.8% of EM trainees reported experiencing at least one symptom of burnout (at least weekly), as compared to an overall prevalence of 45.2%. Despite this, EM residents reported below-average rates of regret about their choice to become a physician (11.4%) or pursue their specialty (3.3%), compared with 14.1% and 7.1% across all specialties.<sup>12</sup>

While burnout is a serious issue EM physicians must be aware of, actively combat, and seek to prevent, the practice of EM can itself be the cure: It is incredibly rewarding. The ED is the safety net within the health care system, and EM physicians have the privilege and responsibility of caring for the system's most vulnerable patients. Emergency physicians walk away from shifts having made a tangible positive impact on our patients and community.

## Emergency Medicine in a Pandemic

EM physicians served at the forefront of the COVID-19 pandemic, as most COVID patients' first contact with the health care system is in the ED.<sup>13</sup> This was particularly true when many primary care and specialty clinics were closed during the height of the pandemic, and it remained true several years beyond the initial outbreak, as some patients sick with COVID were still not allowed to be seen in clinics. **Will this be true for the next pandemic? Yes.** Emergency medicine is the doorway to the house of medicine, and that door is never closed, no matter the circumstances.

## Is Emergency Medicine Right for You?

The "love of every single specialty" seems to be a common feeling among those who pursue EM. In addition to comparing your own traits to those of successful emergency physicians, ask yourself the following questions:

- When you walk through the doors of your emergency department, do you get an overwhelming feeling that you belong there?
- Does the thought of a trauma or code where you can save a life give you a surge of adrenaline and excitement?
- When you see a stranger who is injured, do you run to them?
- Do you enjoy the diagnostic inquiry of undifferentiated illness?



center. These hospitals also come with varying trauma center levels, stroke certifications, cardiac care distinctions, and cancer facilities. This may impact the patient population seen, as well as your availability of resources. Generally, you will spend the majority of your time caring for patients in the ED, though you may spend a small amount of time with other administrative or quality improvement responsibilities.

Some residency graduates may find themselves working in freestanding (non-hospital-based) EDs, where any patient needing further acute care must be transferred to a different facility.

Another career option is as an academic emergency physician at an academic medical center. In this role, part of your time is spent working clinically, teaching and supervising residents and students. Additional time is spent on non-clinical teaching, research, and departmental service. This clinical work can be very different from that of the community physician. You will typically be responsible for more patients while delegating to and supervising your learners. Some health systems offer a hybrid opportunity — some shifts are at the academic medical center and others are at an affiliated community hospital.

As EM has matured as a specialty, more and more graduates are choosing to pursue subspecialty fellowship training. Fellowships are almost always affiliated with residency training programs, and most last one or two years. Fellowships facilitate increased knowledge in an area of EM that can then be developed into a career niche. Many academic departments are looking for fellowship-trained new hires. Some EM fellowships are ACGME-accredited and offer subspecialty board certification, while others might have an associated master's degree. The **EMRA Fellowship Guide** is a great resource to learn more about fellowship training opportunities.<sup>15</sup>

## THE BOTTOM LINE

- ✓ EM is a dynamic, exhilarating, ever-changing specialty that is best fit for those with strong interpersonal skills, a calm demeanor, and a desire to work as part of a team for brief, poignant encounters.
- ✓ Successful EM physicians are kind, hard-working, and flexible, with a penchant for controlling chaos and tolerance for the inherent emotional toll.
- ✓ The EM lifestyle allows for flexibility and portability, without being responsible for a panel of patients during off-time. Emergency physicians work hard when they are on duty and can play and plan when they are off.
- ✓ It is our privilege to act as a safety net and care for all who present to the ED.



# The Preclinical Years

**If you have decided that EM is for you,** then you are probably wondering what you can do to increase your chances of successfully matching. Your performance in preclinical courses and participation in extracurricular activities can impact your chances of matching at your top-choice residency program.<sup>1</sup>

Start by reviewing Table 2.1, which was formatted using recommendations from the Emergency Medicine Medical Student Planner, as created by the CORD Advising Students Committee in EM (ASC-EM).<sup>2</sup> Additional planners have been specifically tailored for applicant populations, such as osteopathic and military students. Those planners can also be found on the CORD ASC-EM website at [www.cordem.org/resources/professional-development/ascem/](http://www.cordem.org/resources/professional-development/ascem/). These planners are a great starting point and serve as a “map” through the EM application process by year of training. *Please note that some planners were created before Step 1 became pass/fail, and the Step 2 average score may vary annually.*

## Academics: Preclinical Basic Sciences

Perhaps the most obvious component of the preclinical years is the basic science courses. Many schools are opting to grade courses as pass/fail, but regardless of the grading structure, you must have a firm grasp of the information. In EM, we are proud to see all types of patients and therefore are expected to manage and stabilize a wide range of maladies. Building a solid foundation will ideally prepare you for the USMLE Step 1 and/or the COMLEX Level 1 exams and the NBME/NBOME subject exams during your clinical years. Preparing for your success begins on Day 1.

**At-Risk Candidates:** Failing a course will be seen as a red flag, but failing one course does not automatically disqualify you from a residency in emergency medicine. What is most vital is identifying the reason for the failure and taking corrective action.

If you feel overwhelmed by the workload, reach out to the course director or someone in your school's office of student affairs. Many students have been able to excel in undergraduate courses with mild learning disabilities, but, under pressure, might initially be unable to cope with the vast amount of work

in medical school. Early recognition is important, and your school likely has resources to assist you. Further, there are many time-management resources online, ranging from videos to customizable planners and calendars.

Failing multiple preclinical courses is a more difficult hurdle to overcome. Often when a student fails multiple courses, they fall behind their original class. Failing two courses in the first year can possibly be remediated in the summer. However, failing two or more courses in the second year may delay the clinical years. If this happens, work with your office of student affairs, as staying in phase with your class will be weighed against your chances of scholastic success. If you are still considering EM, find an EM advisor ASAP. Failing multiple courses raises your risk of failing to match in EM — so be proactive.

**TABLE 2.1. CORD ASC-EM Medical Student Planner<sup>2</sup>**

Source: CORD ASC-EM Planner

| Year 1                      | Summer  | Fall   | Winter                                     | Spring  |
|-----------------------------|---|--|--|---|
| <b>Academics</b>            | Basic Sciences — aim to be in top ½ of class  |  |  |   |
| <b>Research</b>             | Complete your institutional review board (IRB) registration process.<br><i>*(Ntl avg = 2 research &amp; 3 publication experiences)</i>  | Mentor and project selection   | Literature search                          | Submit IRB application  |
| <b>Volunteer</b>            | Aim for consistent, longitudinal experiences (at least 3): national societies, student-run clinics, advising/mentoring opportunities, community organizations, international projects, etc. <i>*(Ntl avg = 6–7 volunteer experiences)</i> |  |  |   |
| <b>EM Career Experience</b> | 1. Join your school's EMIG<br>2. Join EMRA  |  |  | 1. EM based continuity clinic or shadowing<br>2. Find an EM advisor and explore CORD ASC-EM resources |
| <b>Misc.<sup>^</sup></b>    | Keep track of experiences for CV  | Attend professional conferences (EMRA, ACEP, ACOEP, SAEM, AAEM, AMA, etc.) |  |   |
| Year 2                      | Summer  | Fall   | Winter                                     | Spring  |
| <b>Academics</b>            | Basic sciences — aim to be in top ½ of class  | Start studying for USMLE Step 1 +/- COMLEX Level 1                         | Begin planning and coordinating clerkships | Take Step 1 +/- Level 1   |
| <b>Research</b>             | Await IRB results (likely resubmit with changes)  | Data collection  |  |   |
| <b>Volunteer</b>            | Take leadership positions in volunteer organizations and complete a volunteer project   |  |  |   |
| <b>EM Career Experience</b> | Take a leadership position in your EMIG   |  |  | Meet with EM advisor to discuss early strategies for success  |
| <b>Misc.<sup>^</sup></b>    | Keep track of experiences for CV  | Attend professional conferences (EMRA, ACEP, ACOEP, SAEM, AAEM, AMA, etc.) |  |   |

<sup>^</sup>Conferences may offer numerous opportunities for students considering a career in EM; attendance is not required or considered a factor that influences a student's potential to match in EM

It is worth noting a few other ways your preclinical performance will play a role in the residency application process. First, the Dean's Letter, or Medical Student Performance Evaluation (MSPE), includes information on your preclinical performance. The MSPE is a required component of the residency application and is reviewed by residency program leaders when deciding which students to invite for interviews. Second, preclinical performance is considered by school committees responsible for selecting honor society or fraternity members for induction into Alpha Omega Alpha or Sigma Sigma Phi.

## Finding Advisors and Mentors

Finding advisors and mentors can be as difficult as it is to agree upon a definition of the two terms. During the preclinical years, many medical schools will assign advisors who might not be EM physicians. While their advice is important, their role is different from that of a specialty-specific advisor and mentor. The CORD ASC-EM defines advisors as EM academic faculty who provide specialty-specific, evidence-based advice.

In contrast, mentors will help coach you and often act as role models. They can provide guidance and can offer intelligent direction on more generalized career advice. Mentors should be individuals whose professional and personal advice you seek and whose character you hope to emulate in your own life.

A positive aspect of medical education is the shared support you'll find from your professional community. Finding quality advising and mentorship will be beneficial, and multiple people can fill such roles. A mentor can be a peer who can offer their recent experiences to help guide you. If your school has an EM residency program, then shadowing a resident or faculty member can help establish a mentor-mentee relationship, or you can get matched to a mentor through the EMRA Student-Resident Mentorship Program.

Ideally, you should obtain an advisor who is designated by your school or EM department and is affiliated with an ACGME-accredited EM residency program. If such a person is not available, then start by contacting physicians in the ED and let them know you are seeking an EM advisor. While anyone who is residency-trained in EM can provide career guidance, a faculty member with expertise and experience in advising students through their preclinical and clinical years in preparation for a match in EM is best.

If your school does not have an affiliation with a core teaching hospital or a residency program, review the CORD ASC-EM advising resources at [www.cordem.org/involved/Committees/advising-student-comm/](http://www.cordem.org/involved/Committees/advising-student-comm/). You may also benefit from the EMRA Student-Resident Mentorship Program.<sup>3</sup> This online service allows students to connect with residents who self-identify as mentors. Students can also join virtual advising sessions through EMRA Hangouts.

Lastly, faculty advisors are often available during your EM elective or audition (out-of-town) rotations; consider asking the clerkship director or one of the other residency leaders for an advisor.

**Osteopathic Candidates:** Your institution may not offer EM-specific academic advising if not affiliated with a residency program. If this is the case, consider reaching out to recent grads, local residency programs, and national mentoring programs through ACOEP-RSO, EMRA, or CORD.

## Emergency Medicine Interest Groups (EMIGs)

A commitment to EM can be difficult to demonstrate during the preclinical years. One easy way is to join your school's EMIG. By joining the group, you will gain insight into the world of EM. Skills workshops, ranging from suturing to

advanced cardiac resuscitation, are often provided. Talks from local and regional experts are especially useful.

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*Joining an EMIG demonstrates your commitment early and can help you gain valuable leadership opportunities and mentorship connections.*

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In addition to being a member of the EMIG, you can potentially become a leader of the organization. As a leader, you will be able to help shape and plan the workshops, and you will also gain other valuable leadership experience. Lastly, through your local EMIG, you will often meet seasoned advisors and mentors, and you may find

more opportunities for research and/or clinical experiences.

## Preclinical Exposure to EM

At many schools, EM is not a required rotation during your clinical years, so you may have limited exposure before the time you need to decide which specialty to pursue. Since it may be difficult to find extra time to shadow in the ED while on other clinical rotations as a third-year medical student, spending time in the ED early on can play a crucial role in helping you decide if this is the environment where you can see yourself spending the rest of your career.

## Service, Leadership, and Advocacy

The NRMP Match data shows the mean number of volunteer experiences as 7.8 for allopathic students, 7.3 for osteopathic students, 5.2 for U.S. IMG students, and 6.0 for non-U.S. IMGs.<sup>1,4,5</sup> While sporadic volunteer opportunities such as a day in a soup kitchen or working a support tent at a 10K are important, long-term involvement with a program is viewed as more substantive.

Program directors (PDs) in EM were surveyed by the NRMP, and 70.3% reported that leadership qualities were an important factor in determining competitiveness for residency. This was noted to be more important than your personal statement and honor society membership.<sup>6</sup>

While EMIGs are a great way to get your “feet wet” with leadership roles, additional options to get involved are through local, state, and national EM organizations such as EMRA and ACEP. By getting involved at the state or national level, you can advocate for the interests of your patients and colleagues and develop the skills to become a leader. These are also great opportunities to meet other students, residents, and faculty who are excited about EM. While leadership and extracurricular activities may help enhance your residency application, remember that mastering the basic sciences and building strong foundational knowledge should always come first.

## Research as a Medical Student

Program directors use many criteria to help select their residency class. The number of research experiences by various applicant groups varies (Table 2.2).<sup>1,4,5</sup> Though this amount of research involvement may seem intimidating during medical school, many medical students have performed research before medical school. The residency application often includes all research performed, including research done during undergraduate and graduate education. Fortunately, the PD survey demonstrates that only 36.5% of PDs report research was important for offering interviews, and only 23% said it was important for ranking.<sup>6</sup>

**TABLE 2.2. Average Research Experience of Successful EM Candidates in the 2022 NRMP Match<sup>1,4,5</sup>**

|   | Allopathic | Osteopathic | U.S. IMG | Non-U.S. IMG |
|---|------------|-------------|----------|--------------|
| <b>Number of Research Experiences</b>                       | 3.2        | 1.9         | 1.8      | 2.8          |
| <b>Number of Abstracts, Presentations, and Publications</b> | 5.1        | 2.7         | 2.2      | 8.9          |

While performing research can be beneficial, finding the “perfect” research project during medical school can be difficult. Doing research just for the sake of doing research is often not advised, especially given the lower emphasis EM PDs place on this activity. Furthermore, doing research to pad your CV or to have another talking point during your residency interviews is also not advised. It is usually clear during the interview process how much involvement one had

in the projects they have listed and whether they were truly passionate about the work.

If your school does not have a department or division of EM, finding a project that interests you outside of EM is an option. Most medical schools have contacts for research opportunities. If your medical school does not, reach out to faculty in EM to see if there are any research projects for you to join. Lastly, your medical school may be close to another, and perhaps you can find a research project advisor or mentor at that location.

## Initial Medical Licensing Exam

Finding leadership and research opportunities in medical school will provide valuable experiences, contribute to a robust EM application, and ultimately contribute to your effectiveness as an emergency physician. However, no amount of leadership, research, or volunteer activities can compensate for a medical licensing exam failure.

In 2022, both the USMLE Step 1 and COMLEX Level 1 changed to a pass/fail scoring system.<sup>7</sup> Both exams were previously reported as a pass or fail grade, as well as a score. This scoring metric was used by PDs to evaluate and compare residency candidates.

There are multiple reasons why it is important to study and do your best on Step 1/Level 1. Passing on the initial attempt is very important. On the 2021 NRMP PD Survey, PDs rated the mean importance of certain performance characteristics in deciding whom to interview: failed USMLE or COMLEX exams had the highest mean importance rating of 4.6 and 4.7 out of 5, respectively.<sup>6</sup> **Failing a USMLE or COMLEX exam is a red flag and will significantly impact your likelihood of matching in EM.** Additionally, performance on USMLE Step 1 has a strong positive correlation with performance on Step 2, which produces a test result (pass/fail) and a test score (three-digit score range of 1 to 300).<sup>8</sup>

Because passing Step 1/Level 1 on your first attempt is highly important to EM PDs, you should plan early on how to best prepare for the exam(s). First, talk with your mentors, especially if they are residents or students more senior to you. You may find it beneficial to purchase commercially available review books, flashcards, and question banks as study aids during your preclinical years to maintain basic science knowledge through Step 1/Level 1. Recent research suggests that first-year medical school performance and retrieval practice in the form of practice questions are effective ways to prepare for the USMLE Step 1.<sup>9</sup> While passing your classes needs to be your top priority, studying the relevant board review material simultaneously is a great way to prepare for Step 1/Level 1 and subsequently Step 2.

**Osteopathic Candidates:** Though osteopathic medical schools require COMLEX Level 1, Level 2, and Level 3 for licensure, many residency programs require USMLE Step 1 and/or 2 for all applicants. Use EMRA Match to filter programs based on licensing examination performance and if USMLE is a requirement.

There are also differences in the programs that accept COMLEX alone compared to those that still prefer USMLE. For example, in one recent study, the primary training site of programs that accept COMLEX alone are more commonly community-based than university-based.<sup>10</sup> While some programs filter applications based on licensing exam scores available, not all do.<sup>11</sup> In November 2018, the AMA House of Delegates created a policy calling for the AMA to promote equal acceptance of USMLE and COMLEX scores.<sup>12</sup> The study outlined above found 107 programs (of the active 278 programs at the time) preferred USMLE scores, while 151 reported accepting COMLEX scores alone.<sup>10</sup>

Additionally, acceptance of COMLEX Level 1 may change with USMLE Step 1 and COMLEX Level 1 now being pass/fail examinations, but that is still unknown. Available data indicates that if you are an osteopathic medical student, taking at least USMLE Step 2, in addition to COMLEX Level 2, will open more opportunities for residency interviews.

**At-Risk Candidates:** While most students take and pass USMLE Step 1/COMLEX Level 1, some do not. Not passing Step 1 of the licensing examination will significantly impact your application strategy. However, an unpublished survey by CORD ASC-EM indicates there are programs willing to consider applicants who retake Step 1 and pass.<sup>13</sup>

If you fail Step 1, contact your office of student affairs and your advisor so you can come up with a plan to retake the exam and perform well. Students can use EMRA Match to filter which programs report having recently interviewed applicants who have previously failed Step 1 for a below-average score by taking Step 2 early and ensuring strong performance on clinical rotations.

As you look forward to the clinical years of medical school, remember the best students and physicians built strong foundational medical knowledge during the preclinical years of medical school. The effort you put forth during your first two years will pay dividends for you and your patients as you move into your clinical rotations, residency, and beyond.

## THE BOTTOM LINE

- ✓ The preclinical years provide a crucial foundation for the knowledge needed to succeed on medical licensing exams, during your clinical years, and on your EM rotations. Effort in the early years has a huge return on investment for the residency application process.
- ✓ Seek out opportunities to explore EM early; this will help you decide if EM is a good fit for you.
- ✓ If you have a red flag such as a Step 1 or Level 1 failure or a failed preclinical course, seeking early guidance from an EM advisor is critical.
- ✓ When planning your research and volunteer activities, keep in mind that PDs value meaningful commitment over sporadic and superficial involvement **(quality over quantity)**, and choose to dedicate your time to activities you truly care about.



## Third Year and Planning for Fourth

**The start of your third year marks the first major transition** into regular clinical responsibilities. It is an exciting time! You are able to apply your basic science knowledge to clinical practice, participate as part of a health care team, and regularly spend time with patients. At the same time, your responsibility increases, and more of your time is spent at the bedside rather than in the classroom. Your schedule will be more rigorous. The way you learn may need to evolve. Your performance in core rotations is a critical part of your residency application, so performing well is important. You will also be simultaneously planning your fourth year, which can be both exciting and stressful. What is the key to success during your clinical years? Advanced planning.

### Third Year

**FIGURE 3.1. Important Time Frames in Third Year**

Source: CORD ASC-EM Planner

| Summer and Fall                               | Winter   | Spring  |
|---|--|---|
| Start of third year and core non-EM rotations | Continue or start to research EM home/away rotations<br><br>Start planning for Step 2: scheduling and studying<br><br>Meet with your academic EM advisor | Finish core rotations<br><br>Meet with your academic EM advisor if you haven't done so<br><br>Apply for and confirm EM rotation dates<br><br>Study for Step 2 |

**Military Match:** If you are a military Match candidate, the timeline is accelerated. Applicants should research rotations early (summer of third year) and plan to rotate much earlier than non-military peers. **You will be applying for and scheduling rotations in the winter!**

**IMG Candidates:** Ensure paperwork is completed in time to allow for U.S. rotations. Consider researching away rotations as early as possible (summer of third year) so you can apply preferentially to institutions that accept your visa.

**Couples Match:** Meet with your advisor (individually and as a couple) to discuss career goals and how to increase your competitiveness as a couple. Consider these questions: What does couples matching mean to you? What compromises are you willing to make? What compromises are you *not* willing to make?

**Latecomers:** If you are undecided about your specialty but considering EM, meet with an EM advisor early in third year to discuss your options.

## Academic Performance in Core Clerkships

Performing well in your core clerkships is critical for a number of reasons. Making the most of your rotations and performing at a high level will:

- Accelerate your Step 2 preparation
- Allow you to apply your knowledge to patient care during your EM rotation(s)
- Make you a more competitive applicant

Narrative comments from your evaluations and information about your performance relative to your peers will be included in the MSPE, also known as the Dean's letter. Per NRMP Match data from the 2021 Program Directors Survey, **70% of PDs cited “grades in required clerkships” as an important factor** when selecting applicants to interview, with a mean importance rating of 3.9 out of 5.<sup>1</sup> AOA and other honor society selection committees will also heavily consider your core clerkship performance. Lastly, your grades will impact your final class rank. One study found EM rotation performance and AOA designation were predictors of top performance in residency.<sup>2</sup> Additionally, EM rotation grades have been shown to correlate with rank list position.<sup>3</sup>

## What does all of this really mean?

It means preparation for Step 2 and your EM rotations begins *now*, with your core clerkships. With each rotation you are building your knowledge base and residency application.

**At-Risk Candidates:** Failing a clerkship is a major red flag. Nearly all programs reported “rarely or never” interviewing applicants with a clinical course failure on a recent CORD ASC-EM survey of EM educators.<sup>4</sup> A clerkship failure should prompt consideration of a non-EM backup plan and a meeting with your academic EM advisor. Alternatively, performing at a high level on clerkships can help mitigate the effect of a failure on USMLE Step 1 or COMLEX Level 1.

## Core Clerkship Pearls

Set yourself up for success on your core rotations because each of them will ultimately help you be a better emergency physician. First, you can ask peers what worked well for them. What books did they read? Did they use any other resources? Next, make sure you review the syllabus and grading criteria. If a large part of your grade is exam performance, then creating a study plan for that rotation is important. Talk to your attending and supervising residents about what they expect from students. Finally, ask for feedback from faculty and the clerkship director early in the rotation so you can identify areas for improvement. Clerkship directors can help you come up with a plan to address any areas of concern.

### TABLE 3.1. Core Clerkship Pearls

**Surgery** — Success is all about dedication and preparation. Learning how to tie sutures before the start of your rotation is essential. Arrive early to pre-round, take time to “own” your patients, and absorb all you can about post-operative care. Don’t avoid the operating room; there you’ll learn valuable lessons on procedures (chest tubes, central lines, tracheostomies, etc.). Be sure to participate in clinic, too! Learning to evaluate wounds and manage postoperative complications is important. Examine any patient who is presenting for emergency surgery, as learning how to recognize an acute abdomen is a critical skill.

**OB/GYN** — You will deliver babies as an emergency physician! Make every effort to get hands-on practice while on your rotation. Pay particular attention to the techniques used in difficult deliveries (like shoulder dystocia). Also, practice reading fetal monitoring strips every day, as this is a skill commonly tested on your shelf exam. Ask if you can perform cervical checks during labor to get a sense of the degree of dilation and understand the various stages of labor. Being sensitive to gynecologic complaints and expertly and gently performing a pelvic exam is an essential skill in the ED. Lastly, participate in the care of patients with bleeding in pregnancy and pre-eclampsia, as well as postpartum patients with complications or breastfeeding concerns — these patients often present to the ED after-hours.

**Psychiatry** — EM physicians care for patients with a variety of mental health concerns, and many of these patients have limited access to care. Learning how to help patients find community resources is key. Also, learning how to identify those in acute psychosis or with a true psychiatric emergency is crucial. While rotating, try to become an expert in psychiatric medications, their dosing, interactions, and long-term and life-threatening side effects.

**Pediatrics** — Although there are many things to memorize during your pediatric rotation (such as developmental milestones and immunization schedules), there are also EM-specific pearls. Learn the basics such as normal and abnormal vitals for different age groups, how to properly perform nasal suction on infants or toddlers, and how to counsel families on safe-sleep habits. Take time to learn the basic treatment regimens for asthma, congenital abnormalities and their physiology, and changing physical exams at different ages.

**Family Medicine/Internal Medicine** — Understanding the hospital course and basic disease processes for the most common illnesses is crucial. During your IM rotation, it is important to take responsibility for your patients. Know their labs from three days ago, their vitals for the past 24–48 hours, and, most importantly, ask the nursing staff how they are doing. Your IM rotation hinges on collaboration between you and the entire health care team. Family medicine rotations vary at different institutions. While rotating, try to become an expert in antihypertensive and diabetes medications, including their indications, dosing, interactions, and side effects.

## Dean's Letter/Medical Student Performance Evaluation

The MSPE is an aggregation of all of your medical school accomplishments and is compiled by your home institution. This letter places a heavy emphasis on your core clerkship performance and feedback, as well as highlights your background, preclinical performance, and any service work or publications you may have. Core clerkship performance is critical, with many MSPEs providing summative rotation comments and a visual representation of your performance compared with your peers (typically a series of bar graphs or charts). According to the 2021 NRMP survey, 77% of PDs cited the MSPE as an important factor when selecting applicants to interview, with a mean importance rating of 3.8 out of 5.<sup>1</sup> Most schools offer you the opportunity to review your MSPE before it is sent out. It is important to be aware of the content of your MSPE because below-average performance or potentially negative comments could be seen as a red flag and should be discussed early with your academic EM advisor. Additionally, interviewers might ask you about them. If you're aware of any potentially problematic comments, you will have the opportunity to prepare how you might discuss them in an interview.

## Planning for Your Emergency Medicine Clerkships

As an EM-bound student you should complete two EM rotations so you have two letters of recommendation (in EM we refer to these letters as eSLOEs, electronic Standardized Letters of Evaluation; see **Chapter 6: Crush Your EM Clerkships, Secure Your SLOEs**). While most required EM rotations are during fourth year, some EM rotations are offered during third year. Also, some schools with a required fourth-year EM rotation may allow students to rotate early (as an M3) if they have met the prerequisites. The experience gained on an EM rotation during the third year of medical school varies based on school, program, and timing. For example, if you rotate in the last month or block of M3, after all core rotations, that is much different than rotating in November of M3 before your surgery and pediatric rotations.

If your school offers or requires a third-year EM rotation, or permits you to schedule the M4 rotation as an M3, find out if they will write an eSLOE. Some institutions will not provide an eSLOE for M3s. If an eSLOE is an option, be sure to ask if the eSLOE will compare you to other M3s or to the M4 cohort — the added experience, confidence, and clinical competence of the M4 group may diminish your evaluation. An experienced EM advisor can help answer some of these nuanced questions, as each student's circumstances are unique.

Ideally, you will complete your home institution ("home EM") rotation first to get your feet wet before your away EM rotation. Unfortunately, EM is not a required rotation at all medical schools, so this isn't always possible. If you do not have

a home EM rotation with an ACGME-affiliated residency program, your only options will be away rotations. Late fall and early winter of your third year is the best time to start researching away EM rotations. EMRA Clerkship Match is a great place to start when researching programs.<sup>5</sup> Alternately, use the EMRA Medical Student Advising Resources for Away Rotations to find even more specialized opportunities, such as international student rotations, diversity-oriented spots, and more.

There is more than one method for you to apply for away rotations. Some schools use the Visiting Student Learning Opportunities (VSLO), a centralized application service offered by the AAMC. Other schools have an “in-house” process that is unique to their school. “Participates in VSLO” is a filter on EMRA Clerkship Match, so you can easily find out which school uses which system. Clerkships that do not participate in VSLO will usually discuss how to apply for a rotation on their website.

The most critical thing is that you have at least one EM rotation completed in time to have an eSLOE from an ACGME-affiliated residency program in your file before applications are released to programs (usually in mid- to late September (See **Chapter 5: Applying for Away Rotations** for more detailed information).

**Military Match:** The timeline is accelerated. Applicants should research rotations early and plan to rotate as early as January of M3. Military rotations are set up by contacting the program directly via email.

**Osteopathic and IMG Candidates:** Be aware that your school may not have a home rotation so you must spend time researching academic programs with a history of accepting osteopathic and IMG applicants — **EMRA Match** can help with this. **Start EARLY** because you will need two away rotations in lieu of one that others are searching for.

**Latecomers:** Work with your EM advisor or clerkship director if you are having difficulty scheduling rotations. They can be invaluable resources of experience and connections.

Fourth Year

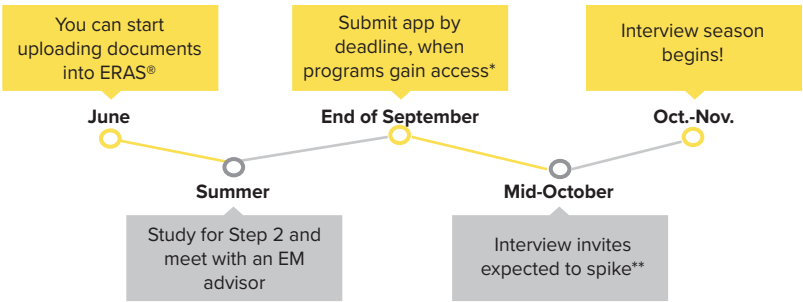
FIGURE 3.2. Important Time Frames in Fourth Year

Source: CORD ASC-EM Planner

| Summer   | Fall  | Winter                           |
|--|---|----------------------------------|
| Complete at least 1 EM rotation by mid-September | Complete EM rotation(s)                     | Interview for residency          |
| Prep for and take Step 2                         | Prepare and submit ResidencyCAS application | Complete M4 coursework/rotations |
| Meet with your academic EM advisor               |   |                                  |

FIGURE 3.3. Important Dates

Source: CORD ASC-EM Planner



\* Dates may change annually, so check the ResidencyCAS website for definitive dates.  
\*\* CORD sets a voluntary Common Interview Release Date for EM programs, which changes annually.

**IMG and At-Risk Candidates:** Have two (instead of a minimum of one) rotations completed early so that both eSLOEs are in ResidencyCAS on the opening day for programs. Program leaders responsible for interviewing applicants recommend 2–3 eSLOEs for IMG applicants.

**Military Match:** The timeline is accelerated. The Match takes place in December of fourth year. Apply and be prepared to interview at civilian programs in late December/early January in case you don’t match into a military program.

**Latecomers:** Even if you do not have a completed eSLOE by opening day, do not delay in submitting your ERAS® application. Only 15% of programs reported that it was “highly likely” that an application would be reviewed if it were completed after the ResidencyCAS opening date in September.<sup>6</sup>

## USMLE Step 2

Preparing for USMLE Step 2 begins during pre-clinical courses and spans all of your core clinical clerkships. Your daily efforts to make the most of your rotations and master the learning objectives will save you time in the long run. In considering Step 2 preparation, take some time to reflect on your USMLE Step 1/ COMLEX Level 1 and clerkship exam performances: What worked well (or not)? What were your lessons learned?

Residency programs are evaluated on the rate at which their graduates pass their board exams when they finish residency. It has been demonstrated for many specialties, including EM, that not passing a USMLE or COMLEX exam is a strong predictor of struggling to pass later exams.<sup>7</sup> This correlation leads PDs to worry about applicants who struggle with these types of knowledge assessments. According to the 2021 NRMP PD survey, 77% of respondents listed USMLE Step 2 (and COMLEX Level 2 scores) as a factor in offering interviews.<sup>1</sup> Further, USMLE Step 2 scores were given a mean importance rating of 3.8 out of 5 (compared to 3.5 for USMLE Step 1). Because of its clinical focus, USMLE Step 2 is often considered to be at least equally important as USMLE Step 1.<sup>1,4</sup> The bottom line is USMLE Step 2 performance is very important — your work is not done after Step 1/Level 1!

With USMLE Step 1 and COMLEX Level 1 moving to pass/fail, the importance of having a Step 2 score in your file when ERAS opens to programs is unknown at this time of publication. Per NRMP data from previous Match cycles, 23% of programs do not require Step 2 scores when deciding whom to interview.<sup>1</sup> However, that means 77% do put some weight on this exam before granting an interview. Without a numerical score for Step 1/Level 1, many advisors think the importance of Step 2 will increase. As a result, we recommend you take Step 2 early enough that the scores will be in your file before late September when residency programs start to review applications. Also, keep in mind that as you progress through your fourth year, it may be more challenging to find time to study during away rotations, while preparing your application, or between interviews.

If you failed Step 1 or Level 1, make sure you have met with an advisor and/or consulted with your office of student affairs and come up with a plan to take the exam again and pass. You might benefit from additional time in the form of a study month, or your school may offer other resources to help you prepare. Working with an EM advisor is crucial — a USMLE or COMLEX failure is a red flag and more likely than not warrants a backup plan. In addition, if you failed Step 1/ Level 1, it is recommended you attempt to bolster your application by taking Step 2 early (end of June or mid-July) so your scores are available to programs when ERAS applications are released. A good Step 2 score may help compensate for

a Step 1/Level 1 failure. The mean Step 2 score for U.S. MDs matching into EM is 247 and 232 for those who went unmatched.<sup>8</sup> Even if you passed Step 1/Level 1, most programs require a Step 2 score before the rank list deadline.<sup>2</sup>

**Latecomers:** Prioritize getting your first eSLOE over taking Step 2 early. Both are important, but studies show the eSLOE is more important in offering interviews.<sup>1, 3, 6, 11-12</sup>

In general, it's probably best to allow yourself time to focus on Step 2 and EM rotations independently. However, since there is significant overlap in the period for completion of each, this may not be possible. Your school may have deadlines that mandate a completion date during an eSLOE-granting EM rotation. For those who feel a dedicated study month (or two weeks) is needed, this should be done only if timing allows for scheduling at least one EM rotation over the summer months. Remember, your goal is to have at least one eSLOE, but preferably two, uploaded to ERAS by opening day.

**Osteopathic Candidates:** As there is no reliable score conversion from COMLEX to USMLE, there are still residency programs that prefer USMLE scores over COMLEX scores alone, although the gap is closing. To be compared apples-to-apples with your allopathic counterparts and open more opportunities for residency interviews, it is recommended that you take USMLE Step 2 early to have your score available when ERAS opens.<sup>9,10</sup> As an osteopathic student, you do not need to take USMLE Step 1 in order to take USMLE Step 2.<sup>13</sup>

## Fourth Year Coursework

EM rotations will take up at least two months of your year. Schedules don't always align between schools, so you may find yourself with an odd week or two as you set up your away rotation(s). Work with your Dean's office to see what options you may have if your away rotation schedule doesn't align with your school's schedule — some schools are flexible about this, but some are not. Your school may also have required coursework. Students are typically able to enroll in electives with flexible scheduling or take time off for interviews.

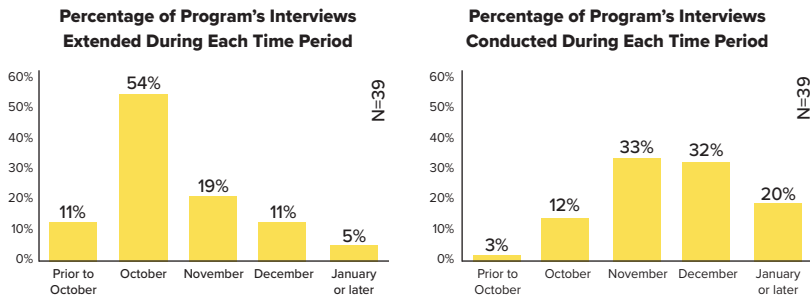
According to the 2020 PD survey for the 2019–2020 interview season, the majority of interview invites were sent in October (54%) and November (19%), and interviews were conducted in October (12%), November (33%), December (32%), and January (20%).<sup>14</sup> **Speak with your advisor or upper-year mentors who have gone through the specific coursework at your school to determine which electives are best for interview season in terms of flexibility for interviewing.**



For any rotations during interview season, be sure to communicate with as much advance notice as possible regarding your interview schedule. Keep in mind that most courses or rotations have attendance requirements.

After you have completed your two EM rotations, consider broadening your coursework. As an EM physician, you will need to draw upon a broad skill set during your career. Both EM and non-EM electives can help you build important skills.

**FIGURE 3.4. EM Program Interview Activities, 2020 Match<sup>14</sup>**



## EM Subspecialty Electives

To further explore your interests in the field of EM, consider an elective in a related area. There are several clerkships in EM subspecialty areas including ultrasound, pediatric EM, toxicology, EMS, wilderness medicine, etc. Such rotations will help you expand your knowledge base and can also help you to get to know another program's faculty and residents. They also open your eyes to the versatility of a career in EM and help build your excitement for residency and beyond. While subspecialty rotations often provide a letter of recommendation (known as an EM subspecialty SLOE), these letters are not given the same weight as a traditional eSLOE because they reflect your performance in a narrow area within EM. However, it is still important to request a SLOE from an EM subspecialty rotation to submit with your ERAS application.

**IMG Candidates and Latecomers:** For applicants struggling to get 1-2 (or any) rotations that can provide a traditional group eSLOE, a SLOE from a non-residency based EM rotation or an EM subspecialty elective in order to obtain an EM subspecialty SLOE will be the next best options.

## Non-EM Electives

### *Ophthalmology*

Eye complaints in the ED can be challenging for several reasons. Consider completing an ophthalmology rotation to become proficient at slit lamp examinations. Eye foreign bodies, ocular trauma, and vision loss complaints all warrant a good slit lamp exam. Additionally, learning how to use fluorescein and measure intraocular pressure will certainly put you a step ahead as an intern.

### *Orthopedics*

Performing a complete musculoskeletal exam as well as recognizing and reducing fractures and dislocations are crucial skills for any emergency physician. A rotation in ortho can also help you communicate effectively with your consultants in the ED. Learning fracture types (Smith's fracture vs. Colles' fracture, Weber classification, etc.), the nomenclature of specific bony areas, and key information for your consultant will make your interactions with orthopedics colleagues much smoother. **Absorb all you can about splinting and casting!** Our orthopedic colleagues have a wealth of information on the best ways to immobilize fractures and are usually very willing to teach you.

### *Dermatology*

Take this opportunity to learn how to recognize life-threatening rashes and lesions that may be indicative of serious diseases. Ask about the outpatient medical management of common rashes and skin complaints, and try to learn what needs emergent consultation vs. close follow-up.

### *Pulmonology*

Working with a pulmonologist can provide a fascinating insight into what happens to our respiratory distress patients after they are admitted. Learning about how a ventilator works and how to set/adjust ventilator settings is a critical skill and cannot be overestimated. Be sure to observe a bronchoscopy whenever possible to gain a better understanding of the respiratory tree and the extensive sequelae of lung diseases. Pay particular attention to the medication and home care of patients so you can help counsel your patients who have frequent visits for COPD or asthma exacerbations.

### *Cardiology*

Evaluating patients with chest pain is bread and butter emergency medicine. A cardiology rotation can help you learn more about evaluating for acute coronary syndrome, reading ECGs, performing and interpreting echocardiography, and learning more about how patients are evaluated for cardiac problems outside the ED (stress tests, catheterizations, etc.).

**Critical Care**

ICU experiences can provide opportunities to learn new procedural skills, such as placing arterial and central lines. Managing patients on ventilators and various medication drips is a key skill for EM physicians. You can learn about ICU admission criteria and the care and treatment of patients with conditions commonly encountered in the ED such as sepsis, multisystem trauma, stroke, etc. Different ICU experiences like trauma ICU, cardiovascular ICU, neuro ICU, or surgical ICU can diversify your education.

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*As an EM physician, you will need to draw upon a broad skill set during your career. Both EM and non-EM electives can help you build important skills.*

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**Addiction Medicine**

Substance use disorder (SUD) is pervasive throughout all aspects of medicine, but it is especially prevalent in the ED. Many patients get critical addiction care while in the ED for accidental overdoses or from other conditions which are complicated by SUD. The field of addiction medication can have a lasting impact on patients, and understanding the basics of medication-assisted therapy and the critical importance of naloxone education in your local patient population will save countless lives.

**The Human Side of Medicine**

The medical knowledge and clinical skills needed for EM are extensive, but communication, professionalism, and interpersonal skills will also be crucial in your career. They will likely contribute to your overall career satisfaction and even longevity. Take advantage of courses with a focus on palliative care, difficult discussions, or even how to be a better educator. This will make you a stronger EM physician, respected colleague, and patient advocate.

**TABLE 3.2. Timing of Courses, Clerkships, and Activities**

Source: CORD ASC-EM Planner

| Year 3                      | Summer   | Fall   | Winter   | Spring  |
|-----------------------------|--|--|--|---|
| <b>Academics</b>            | Clinical Clerkships: Focus on consistent performance across all clerkships, balance shelf exam with clinical performance | Start studying USMLE Step 2  |  |   |
| <b>Research</b>             | Data Analysis. Write abstract and submit for presentation at national or regional EM meeting                             | Consider writing a case report or small quality-improvement project with a resident or attending from one of your rotations. |  |   |
| <b>Volunteer</b>            | Complete another volunteer project (if possible)   |  |  |   |
| <b>EM Career Experience</b> | Take a leadership position in EMRA or another organization   | Research elective rotations via EMRA Match   | EM or critical care based continuity clinic or shadowing | <ol style="list-style-type: none"> <li>1. Meet with EM advisor to gauge competitiveness and discuss electives and 4th year schedule</li> <li>2. Apply for visiting EM rotations; programs accept applications as early as February</li> </ol> |
| <b>Misc.^</b>               | Keep track of experiences for CV   | ACEP, EMRA Medical Student Forums, EMRA Residency Program Fair at ACEP Scientific Assembly                                   | Review again CORD ASC-EM website and resources           | <ol style="list-style-type: none"> <li>1. Update CV for VSLO</li> <li>2. EMRA Medical Student Forum, Residency Fairs at national/regional conferences</li> </ol>  |

<sup>^</sup>Conferences may offer numerous opportunities for students considering a career in EM; attendance is not required or considered a factor that influences a student's potential to match in EM.

| Year 4               | Summer  | Fall  | Winter   | Spring  |
|----------------------|---|---|--|---|
| Academics            | <ol style="list-style-type: none"><li>Study and take Step 2</li><li>Electives — front load EM rotation(s), EM electives — get at least 1 eSLOE before ERAS opens!</li></ol>                         | Consider elective rotations to expand your knowledge base and skill set: critical care, anesthesia, pediatric emergency medicine, radiology, ophthalmology, orthopedics   |  |   |
| Research             | Write abstract and submit for presentation at national or regional EM meeting, or if already accepted, present at EM meeting  |   | <ol style="list-style-type: none"><li>Present at EM meeting</li><li>Compose manuscript and submit for publication</li></ol>                  |   |
| Volunteer            | Complete another volunteer project (if possible)  |   |  |   |
| EM Career Experience | <ol style="list-style-type: none"><li>EM rotation at home (if offered) and outside institution</li><li>Meet with EM advisor to discuss ERAS application strategy</li><li>Visit EMRA Match</li></ol> | <ol style="list-style-type: none"><li>EM rotation(s) at outside institution if not done in summer; 3rd academic EM rotation not ubiquitously required, please consult advisor</li><li>Consider an EM elective rotation (pediatrics, ultrasound, toxicology, international, sports med, EMS, etc.)</li></ol> | <ol style="list-style-type: none"><li>Interviews — consider rotations carefully to accommodate interviews</li><li>Create rank list</li></ol> | <ol style="list-style-type: none"><li>MATCH DAY!</li><li>Do something fun</li></ol> |
| Misc.^               | <ol style="list-style-type: none"><li>Update CV for ERAS application</li><li>Start writing personal statement for ERAS application</li></ol>  | <ol style="list-style-type: none"><li>Submit ERAS application before opening day (mid-September)</li><li>Residency Fairs — national and regional</li></ol>  | Medical Conferences  |   |

<sup>^</sup>Conferences may offer numerous opportunities for students considering a career in EM; attendance is not required or considered a factor that influences a student's potential to match in EM.

## THE BOTTOM LINE

- ✓ Core clerkships are critical in helping you develop the knowledge and skills to succeed in EM and do well on Step 2. In addition, your performance will be highlighted in your MSPE and is important to EM PDs.
- ✓ Begin planning your fourth year early. This includes researching EM electives and brainstorming a strategy to prepare a complete ERAS application: When will you take Step 2? How many EM rotations do you need to complete before your ERAS application is due?
- ✓ If you do not have an EM advisor, now is the time to find one. An academic EM advisor can provide critical guidance on fourth-year planning. Students at schools without an EM residency or EM advising can email [distanceadvising@cordjobboard.com](mailto:distanceadvising@cordjobboard.com).

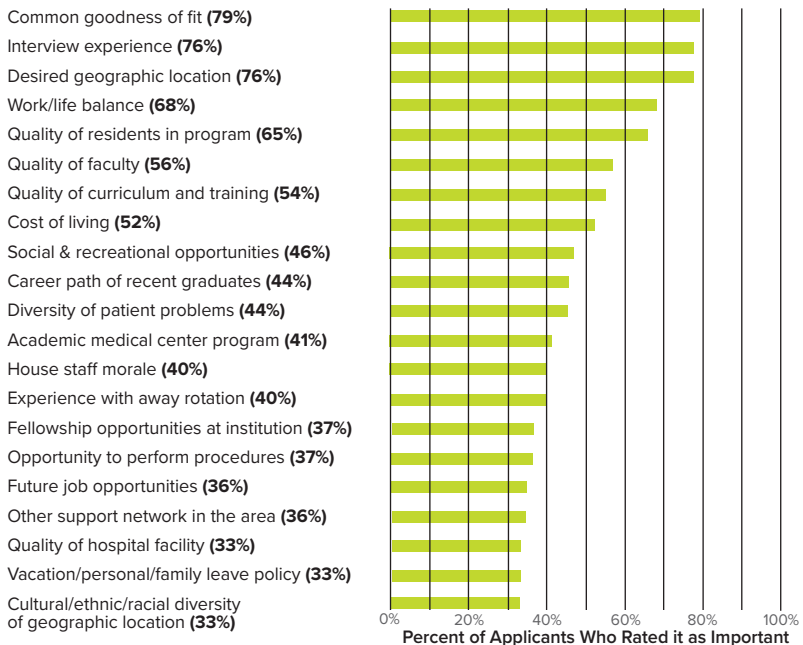
## Finding Your Fit: Learning the Landscape of EM

**One of the most exciting things about medicine** is there is always more to learn. This is true for the application process as well. Now that you have decided on EM, it's time to consider which type of residency will fit you best.

### Factors Important for Residency Selection

While all EM residency programs must meet the ACGME common and specialty-specific program requirements, there is still room for significant variation between programs. Students applying to EM say many factors are important in deciding where they apply and ultimately rank programs (see Figure 4.1).<sup>1-4</sup> Many of these program attributes have been included as filter options in **EMRA Match**.

**FIGURE 4.1.** Percent of U.S. MD Seniors Citing Each Factor and Mean Importance Rating for Each Factor in Ranking Programs, 2022<sup>4</sup>



## Location, Location, Location

Desired geographic location is typically the most important factor during both the application and ranking process. Some applicants want to be close to family, while others are looking to embark on a new adventure or seek unique social and recreational opportunities to enjoy when not at work. The cultural, racial, and ethnic diversity of the patient population may also vary by location. Residency programs in highly desirable urban areas will likely have a higher cost of living. Applicants with significant others may also need to consider the job opportunities available for their partners in each location. Of note, many physicians end up practicing in the same geographic location where they completed their residency training.<sup>5</sup>

**Couples Match:** Remember, you don't have to match at the same institution to be within a certain geographic distance of each other. Target cities and geographic locations that have multiple residency programs in each of your specialties.

**Osteopathic and IMG Candidates:** Certain states and geographic regions have traditionally matched a higher number of osteopathic residents per program per year. The same holds true for IMG applicants.<sup>6</sup> Of note, EMRA Match allows you to filter programs by the percentage of osteopathic and IMG residents they currently have in their program.

## Comparing 3- and 4-Year Programs

One of the many things that makes EM unique is that applicants can apply to both 3- and 4-year training programs. Approximately one-fifth (19.4%) of programs are four years in length.<sup>2</sup> Applicants must weigh the opportunity cost of spending an additional year being paid as a resident, rather than as an attending, with the benefits that can be gained from a 4-year training program.

Many applicants will apply to a mix of both 3- and 4-year programs and must consider what makes an additional year of training at each program “worth it.” For example, an extra year of training may provide additional opportunities to teach, develop experience in maintaining patient flow throughout the entire ED, provide EMS medical direction, allow for unique clinical rotations outside of the ED or within an EM subspecialty area, allow for participation in a longitudinal specialty track during residency (see the “Fellowships/Scholarly Tracks” section later in this chapter), and/or provide additional elective time to tailor your training experience to suit your individual needs. A 3-year program, meanwhile, allows you to enter fellowship training or work as an attending a year earlier.

Elective time is an opportunity to explore other areas within EM, especially if you have special interests like global health, medical education, simulation, research, wilderness medicine, wellness, administration, health equity, sports



medicine, toxicology, EMS, or ultrasound. Elective experiences may help you decide about fellowship training, especially if you’re interested in a fellowship that is not available at your program.

Similarly, if you know you want to pursue a fellowship, a 3-year program might be beneficial to shorten your training years and save you a year. However, at the same time, a 4-year program could also be beneficial because it allows you to participate in more elective time during which you can pursue your interests, build your CV, or participate in a “fellowship track.”

There is no significant difference in moonlighting opportunities, total critical care time, or percentage of time spent off-service during intern year between 3- and 4-year training programs; however, 4-year programs typically offer nearly 14 weeks of elective time, compared to only about six weeks of elective time at 3-year programs.<sup>2</sup>

Four-year programs are more likely to have internal medicine, neuro-ICU, and administration rotations, and on average have an additional 2.4 weeks of time spent doing pediatric EM.<sup>7</sup>

**TABLE 4.1. Training Characteristics at 3- and 4-Year Programs<sup>2</sup>**

| Program Characteristic                 | 3-Year Programs<br>[n=225]<br>(95% CI) | 4-Year Programs<br>[n=54]<br>(95% CI) | Total<br>[n=279]<br>(95% CI) |
|--|--|---------------------------------------|------------------------------|
| Allow Moonlighting                     | 85.3%                                  | 90.7%                                 | 86.4%                        |
| Elective Time                          | 6.4 weeks<br>(6.0–6.9)                 | 13.6 weeks<br>(11.6–15.7)             | 7.8 weeks<br>(7.2–8.5)       |
| Critical Care Time                     | 17.8 weeks<br>(16.8–18.7)              | 20.9 weeks<br>(18.8–23.0)             | 18.4 weeks<br>(17.5–19.2)    |
| Percent Off-Service During Intern Year | 35.1%<br>(32.8–37.5%)                  | 40.7%<br>(35.4–45.9%)                 | 36.2%<br>(34.0–38.4%)        |

**Training Environment**

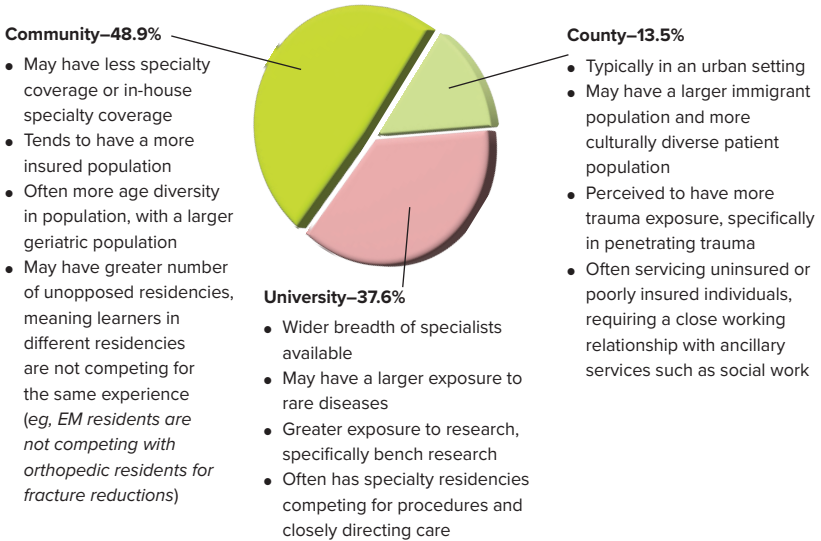
Every residency program is at a sponsoring institution that assumes ultimate responsibility for ensuring the program receives the support necessary to successfully train residents. This sponsoring institution is typically the primary clinical site where residents complete their training and may be a university, community, or county-based hospital (see Figure 4.3 for a breakdown of residencies by primary training environment). Many residency programs have additional sites to provide exposure to experiences not offered at the primary clinical site, such as community and rural sites, to expand learning environments and opportunities. There are pros and cons to each type of training environment. You should consider which learning environment will best prepare you for your ultimate career goals.

## ED Patient Volume

While many applicants consider patient volume to be an important factor in choosing a residency program, this may or may not translate to increased learning opportunities. The ACGME requires the primary clinical site and any ED where a resident spends more than four months to have a minimum of 30,000 annual visits. The primary site should also see a minimum of 3% or 1,200 critically ill patients (whichever is greater).<sup>8</sup> It can be important to explore the total number of critical care weeks vs. the general nature of those critical care experiences to ensure a robust exposure.

### FIGURE 4.2. Prevalence and Types of Primary Training Environments

Percentage of Residencies Self-Reporting Each Hospital Setting, per EMRA Match



While some residency programs boast patient volumes in the hundreds of thousands, which may increase exposure to rare pathology, this may or may not hold true depending on the staffing models used at each program. Some residency training programs will be located at institutions that also train or employ non-physician providers (NPPs). The ability to work with and direct all layers of the patient care team is an important part of your practice. However, it is important to consider how working alongside NPPs in the ED during residency will affect your clinical practice and learning.

Work-Life Balance: Length and Number of Shifts Per Month

Per ACGME, EM residents may not work longer than 12-hour shifts in the ED. They must have a length of time off-duty that is equal to or longer than their scheduled shift length between each work period. Residents may not work for more than 60 scheduled hours per week seeing patients in the ED (and overall work no more than 72 total hours per week). EM residents must have at least 24 continuous hours off every seven days.<sup>8</sup> Within these constraints, there is significant variability, though most programs require interns to work 16-21 shifts per month (of nine hours or less).<sup>2</sup>

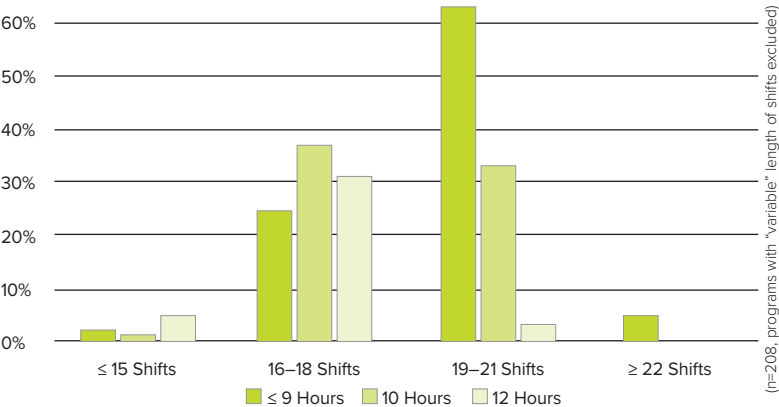
Many residents cite time for personal and professional needs as key in preventing burnout. In one study, the authors found “when baseline needs of adequate sleep and self-care are not met, the capacity for self-actualization is limited. The strained, moment-to-moment mentality many residents experience does not permit introspection, processing of emotions, or learning from challenging patient encounters.”<sup>9</sup>

**Seek enough clinical exposure to become clinically excellent, while maintaining your personal wellness and learning style.** For example, those who learn best by seeing and doing may have a better educational experience at programs with more clinical duties, while those who learn best by reading and reflecting may be better suited to a program with more time for studying.

TABLE 4.2. Average Length and Number of Shifts During PGY1

| Average PGY1 ED Shift Length (Hours) | Percentage of Programs (n=264) | Average Number Shifts Per ED Month During PGY1 | Percentage of Programs (n=222) |
|--------------------------------------|--------------------------------|--|--------------------------------|
| 9 or fewer                           | 37.1%                          | 15 or fewer                                    | 4.6%                           |
| 10                                   | 27.3%                          | 16–18  | 47.9%                          |
| 12                                   | 14.8%                          | 19–21  | 46.0%                          |
| Variable                             | 20.8%                          | 22 or more                                     | 1.5%                           |

FIGURE 4.3. Percentage of Programs with Each Combination of Average PGY1 Shift Length and Frequency<sup>2</sup>



## Program Size

The ACGME requires a minimum of 18 residents total per EM residency program to foster a sense of community and to ensure there is a critical mass of learners to support educational activities.<sup>8</sup> The largest EM residency is a 4-year program that accepts 25 residents per year for a total of 100 residents. There is nothing inherently good or bad about a large or a small program. A smaller residency may have more dedicated one-on-one instruction and a closer-knit community, while a larger residency program may have greater resources, greater flexibility in scheduling, and more varied rotations. It is important to consider the number of clinical sites staffed by a program's residents to understand how much actual opportunity for the interaction you will have with your colleagues while on shift. Additionally, as with every piece of "finding your fit," it is important to consider what type of environment you thrive in — whether a smaller or a larger program.

## Residency Program Culture

Each residency program will have a relatively unique culture that results from the personalities who work there and the program's priorities. Which factors are overall most important in determining if you will be happy at the program? Which training environment do you think you will work and learn best in? Do you need a family-friendly program? Are you looking for a program that will push you to your clinical limits or one that will provide more time for pursuing research or other scholarly endeavors?

Arguably, this is the most important factor for any resident searching for their ideal program. You have already chosen the best field there is! You will likely get fabulous training among many of the programs you will be applying to. However, residency is hard — there are long hours, and it is emotionally, mentally, and physically draining. Finding the right colleagues and mentors to lean on is important.

Program culture can be difficult to determine before interviewing. However, some sense of culture can be derived from each program's profile on Facebook, Instagram, Twitter, and other social media platforms, as well as each program's description of its culture on EMRA Match. Many programs have introduced Zoom "socials" that serve as a useful way to get a sense and feel for the culture at each program. The introduction of virtual socials provides opportunities to get more information about each program, meet current residents, and ask specific questions. Lastly, spending time with current residents while on rotation or during an in-person second look can give you a good "insider" perspective.

## Moonlighting

Most EM residency programs (86%) allow residents to moonlight, either internally or externally.<sup>2</sup> Moonlighting is permitted by the ACGME for non-PGY1 residents as long as it does not interfere with their education or cause a violation of duty hours. Internal moonlighting allows residents to work additional shifts within their training program, which provides them an opportunity to assume the mindset of independent practice while still working in a department alongside their regular faculty. External moonlighting opportunities may allow residents to work at urgent care locations or in rural, critical access hospitals where they may be the only physician for miles, stabilizing patients for transport to facilities with more advanced capabilities.

## Compensation & Benefits

Residents of all specialties training at each sponsoring institution are paid on the same PGY pay scale. Nationwide, the average starting salary for interns across specialties is \$64,200.<sup>10</sup> While there may be mild salary differences between programs, given the regional variation in the cost of living, it is not recommended to make this a deciding factor in your rank list. Applicants may want to take note of additional benefits like meal plans, vacation time, parental leave policies, housing subsidies, insurance benefits, CME allowance, and retirement plans.

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*Try to find a program that offers sufficient clinical exposure to become proficient, fits your learning style, and accommodates your personal wellness.*

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## Original Research vs. Scholarly Activity Requirement

The ACGME requires resident and faculty involvement in scholarly activity in order to maintain accreditation. Historically, 39% of EM residency programs have mandated resident scholarly activity requirements to be fulfilled by original research.<sup>11</sup> However, the 2022 ACGME Common Program Requirements allow trainees and their program directors to use a wide variety of options to fulfill scholarly activity requirements, including discovery, integration, application, and teaching.<sup>8,12</sup> Applicants seeking to fulfill their scholarly activity requirements by writing textbook chapters, presenting at national conferences, curriculum development, national leadership positions, or non-peer-reviewed publications should pay attention to each program's requirements.

## Fellowships/Scholarly Tracks

If you are already interested in a fellowship, then attending residency at a program that offers your desired fellowship could be beneficial. You will likely have a better understanding of what the fellowship entails, plus the selection committee will already know you since they will have been your mentors during training. At the same time, it can also be nice to gain exposure to a different training environment by completing fellowship training in a new location. Fellowships can be, and are, entered both from 3- and 4-year programs.

For those who would like to begin developing a niche during residency, either in preparation for fellowship or to make themselves more marketable for a career in administration or academics, some programs offer scholarly tracks in areas such as medical education, administration, EMS, toxicology, ultrasound, and more. These tracks create mentorship communities within a residency program. Some programs require residents to participate in tracks, while others have optional tracks. A 2018 study found scholarly tracks led to higher rates of residents graduating into an academic career for many reasons, including high levels of mentorship, scholarship, and advanced training.<sup>13</sup>

## Newer or Established Residency Programs

There is no data to suggest that a newer vs. established program will give you a better residency experience. However, there are pros and cons to consider. A newer program will likely have more leeway to incorporate new ideas and innovations, allowing residents to make a lasting contribution to the program. A more established program will have the advantage of being a known commodity, with a larger alumni network to access when searching for jobs, fellowships, or niche types of mentorship. It is important to keep an open mind, as either type of program may serve your needs as a trainee.

## Reputation

Avoid picking a residency program based on “reputation.” **There is no “best” residency program, only a set of programs that will be the best fit for you** based on your future goals, learning style, and lifestyle. In September 2014, all major EM organizations wrote a co-signed letter to Doximity concerning the methodology behind its “Reputation” filter in their Residency Navigator tool.<sup>14</sup> That faulty filter has been shown to cause one-quarter to one-half of applicants to influence their rank lists.<sup>15,16</sup> **Rely on objective data, rather than unvalidated “reputation rankings,” when comparing which program will best fit your needs.**

**Osteopathic Candidates: Historic/Ongoing Osteopathic Affiliation**

Starting in 2020, all programs merged under a single GME accreditation system. If a student feels that maintaining an osteopathic-focused education is important, they can find historically AOA programs that have applied for ACGME “Osteopathic Recognition,” which conveys their distinction in educational programming.

Use search filters (percent osteopathic residents currently at the program, acceptance of COMLEX in lieu of USMLE, etc.) in addition to reviewing data on the ACGME website. EMRA Match also allows you to filter programs by the percentage of osteopathic residents they currently have in their program. Reviewing the degrees held by faculty members, either DO or MD, at different programs may be helpful as well. Remember, just because a program does not currently have an osteopathic resident, it does not eliminate your chances — but it can guide a realistic approach to applying.

**THE BOTTOM LINE**

- ✓ Start researching programs early to get a sense of what you find important in programs and which programs fit your needs.
- ✓ Multiple factors go into selecting a residency program. **Only you can determine the program that is the best fit for you.**
- ✓ Avoid relying on “reputation rankings” when considering which programs fit your needs.





# Applying for Away Rotations

**The away rotation plays a critical role in the EM Match.** For the medical student, it is an opportunity to explore different geography and learning environments that may vary by region or hospital. For the residency program, the away rotation offers an independent assessment of a student's ability to learn and grow from the feedback they receive and demonstrate consistency across institutions and different clinical settings.

In the 2021 NRMP Program Director Survey, “Letters of Recommendation in the Specialty” — known in EM as the eSLOE (electronic Standardized Letter of Evaluation) — was one of the most commonly cited factors (90.5% of respondents) in selecting which applicants to interview and had the highest importance rating (4.8 out of 5).<sup>1</sup> As eSLOEs can only be obtained through EM rotations at EM residency programs, it is no surprise that “audition elective/rotation within your department” and “away rotation in your specialty at another institution” were among the other most important factors.<sup>1</sup> (More information about the structure and content of the various SLOE formats can be found in **Chapter 6: Crush Your EM Clerkships, Secure Your SLOEs.**)

## How Many Away Rotations Do I Need?

To be a competitive EM applicant, aim to complete two EM rotations and obtain two eSLOEs. Typically, this will be one home rotation and one away rotation. For students without a home EM rotation, this will be two away rotations at different institutions. Students should have at least one, but ideally two, eSLOE(s) submitted in time for the ERAS application opening in September to be granted interview offers. If you are unable to complete two rotations at EM residency programs by this time, the two eSLOEs should ideally be submitted by the end of October, as some programs prefer two eSLOEs before granting interviews.

PDs place a high value on away rotation evaluations. Two survey studies from 2018 and 2021 showed that **performance on an away rotation is one of the most influential factors PDs consider** when making interview selection decisions.<sup>1,2</sup> At the same time, two studies from 2019 and 2020 demonstrated superior student

performance on home rotations evaluations.<sup>3,4</sup> This suggests that students should complete a home rotation first, followed by an away rotation.

Regarding the number of rotations needed to interview, two studies found 80–90% of programs require at least one eSLOE to grant an interview; in addition, studies and data from EMRA Match have shown that 20–45% of programs require two eSLOEs to grant an interview.<sup>2,5,6</sup> This variance may be due to differences in respondents and wording. Nonetheless, it shows **the importance of having two eSLOEs for a competitive application**. It is exceedingly rare for a program to require more than two eSLOEs. In fact, one study showed that students performed worse on their third rotation.<sup>4</sup> Of note, this data is not meant to apply to subspecialty SLOEs such as ultrasound, toxicology, pediatric emergency medicine, etc. There is rarely a need for a third eSLOE and rotation — unless your advisor feels it's needed to strengthen your application. If this is the case, it should be clearly explained in your residency application.

**Osteopathic Candidates:** For an osteopathic applicant with similar competitiveness to the average allopathic applicant, **79% of residency leadership respondents recommended two eSLOEs**, and only 11% recommended submitting three or more.<sup>7</sup> Remember, if your medical school does not have a residency program, you should secure two away rotations.

**IMG Candidates:** For an IMG applicant with similar competitiveness to the average allopathic applicant, 63% of residency program leadership respondents to a recent survey recommend two eSLOEs, whereas only 19% recommend three or more.<sup>7</sup>

**Latecomers:** Very few programs will extend an interview invitation with no eSLOEs (*only 14 on EMRA Match at the time of publication*), and 61% of programs who responded report extending offers with one eSLOE.<sup>6</sup> Prioritize getting an eSLOE as early as possible after you choose EM. If you have a later letter, make sure to notify the residency programs when it is uploaded.

**At-Risk Candidates:** Having strong clinical skills but difficulty translating this knowledge in testing situations is a familiar struggle. Programs are more likely to consider students with weaker test scores if they have established a consistent pattern of strong clinical performance. Seeking out clerkships that do not have testing requirements as a criterion for grading may also be beneficial for you.

You are not required to submit an eSLOE from every EM rotation you complete. If you suspect that an eSLOE may not be very supportive, additional or alternative letters are often the best way to mitigate this. If you complete an EM rotation and do not submit an eSLOE from the rotation, remember that programs will be able to see that discrepancy — so be prepared to discuss it in your interviews.

## Where Do I Want to Rotate?

Consider a few strategies when deciding where to rotate — targeted, exploratory, or practical.

In the **targeted approach**, you can aim for a specific program or region of the country to explore “personal fit” and demonstrate interest. This is the ideal approach for many, as geography and “fit” are among the most important factors in applicants choosing an EM program.<sup>8</sup> Many programs also prefer a “known” candidate, and this should offset the fear that you might perform poorly on an audition rotation at a specific institution. Regional competitiveness can vary based on the perceived desirability and concentration of residency programs. In a more competitive region, obtaining an eSLOE from a program there may be advantageous (even if you do not “honor”), as programs from the same region will see your dedication to that geographic location.

An **exploratory strategy** may be an option if you’re less geographically inclined. Rotating in a different region adds perspective and opens opportunities during the application season. You should also consider varying clinical environments. Academic, county, and community are a few of the characterizations a hospital/program might have, and they impact how learning is accomplished and patient care is practiced. Exploring different practice environments will help you be more prepared come interview season.

Like interviews, away rotations can be expensive and inconvenient. As a **practical strategy**, we strongly advise you to consider the cost of living, housing, transportation, and your academic schedule when planning for away rotations. To successfully match into EM, your performance and professionalism are more important than where you rotated. It is reasonable to choose an away rotation in the same region to contain cost. Also, discuss your interest in completing an away rotation with your financial aid department and advisor, as there might be options to extend loans to cover costs.

**Osteopathic Candidates:** Certain states and programs have been more “friendly” to osteopathic applicants in the past (**see Chapter 8: Understanding Your Competitiveness**). EMRA Clerkship Match reports that 86% of clerkship programs accept osteopathic students.<sup>4</sup>

**IMG Candidates:** Only 23% of clerkships listed in EMRA Clerkship Match report accepting international students.<sup>6</sup> International medical schools often have a list of affiliated sites, as well as a list of unaffiliated sites at which past students have rotated. Students from international medical schools may benefit from seeking the advice of graduates who have matched into EM to inquire where they completed their EM rotations.

**Military Match:** Students should do at least one, and may end up doing all, of their rotations at a military EM site. Group eSLOEs from military rotations remain useful for gaining interviews at non-military programs.

**Couples Match:** Consider away rotations in cities where both you and your partner are interested in matching. Check with your mentor — depending on your specific application profile, you may need to do two away rotations to maximize your chances for success in the couples Match. This is particularly true if your partner is applying to a competitive specialty.

## How Do I Find Rotations?

Several resources exist to help you find available away rotations. Most residencies will have a clerkship, and you can find information on the residency website. The AAMC's Visiting Student Learning Opportunities (VSLO) site is a portal for away and global rotations in all specialties.

Specific to EM, EMRA Clerkship Match allows applicants to browse, search, and filter nearly 300 residency programs and approximately 200 clerkships.<sup>6</sup> Clerkship filters include:

- Participation in VSLO
- USMLE Step 1/COMLEX Level 1 required
- Spot availability indicator
- Rotation types
- Flexible rotation dates
- Interview policy
- eSLOE authorship
- Consider DO students
- Consider IMG students
- Housing availability
- Vehicle recommended

SAEM also has a Clerkship Directory with a filter tool based on several learning environment factors (region, hospital setting, trauma designation, and the number of positions per rotation). If you're interested in a specific institution, check the program's website directly.

An increasing number of EM departments and institutions offer stipends to students from underrepresented groups to rotate via diversity externship scholarships. These can be found on the department websites or through EMRA, AAMC, CORD, and SAEM databases.<sup>6,9,10,11</sup>

**Osteopathic Candidates:** Fewer than one-third of osteopathic medical schools have affiliated EM residency programs, so osteopathic students must apply smart, early, and realistically to obtain two early academic

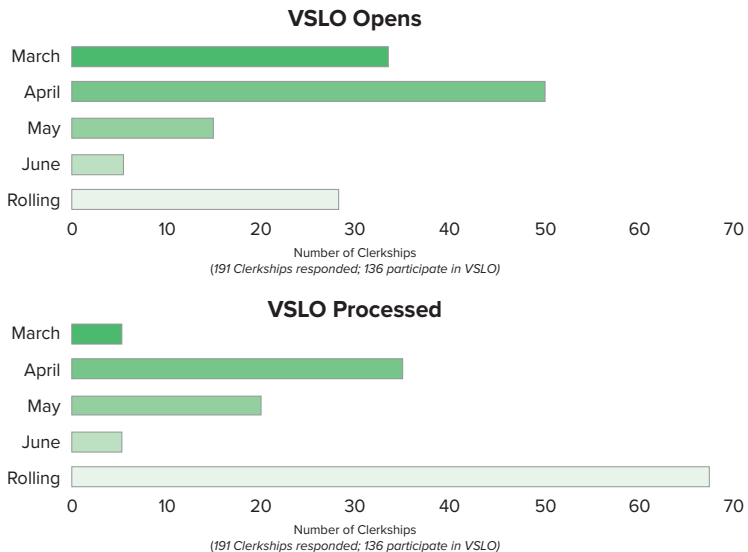
rotations to provide them with competitive eSLOEs.<sup>12</sup> Recent data suggest that on average for most allopathic and osteopathic students, approximately one in 4-5 clerkship applications results in an acceptance.<sup>13</sup>

**IMG Candidates:** Similarly, international medical graduates will not have a home EM rotation and will need to obtain 2–3 SLOEs to be considered for an interview.

## When Do I Apply? When Do I Rotate?

Most institutions begin accepting applications in March or April, with a small minority of programs opening before March.<sup>6</sup> The timing varies by institution (see Figure 5.2). This does not account for application preparation time, so students should plan accordingly. Factors that complicate planning your away rotations include home institution core rotations and other schedule requirements that often extend into mid- to late-summer, as well as inflexibility of the away rotation schedule. Only three out of every 10 clerkships listed in EMRA Clerkship Match advertise flexible rotation dates.<sup>6</sup>

**FIGURE 5.1.** Months that clerkship applications are accepted and processed, as reported by clerkship directors on EMRA Clerkship Match



Students usually complete their home and away rotations in the summer, but many students will not be able to complete their second rotation until late summer, fall, or sometimes winter. On EMRA Match, nearly 33% of programs

report requiring two submitted eSLOEs to grant an interview — putting you at a disadvantage if your EM rotations are not completed by the time programs start to review ERAS applications.<sup>6</sup> This does not bar any student from matching into EM, however, and we strongly recommend students seek advice and plan ahead. In general, students should have a minimum of one eSLOE submitted by the time of ERAS applications open to programs for review in mid-September to qualify for receiving interview offers.

Many clerkships also process applications on a rolling basis, and other students may change their schedule, creating availability as the audition rotation season progresses. Because of this rolling process, it is best to apply as early as possible, allowing for maximum availability in rotation time slots. Institutions may review in bulk and fill their spots early. Delaying your application or limiting your rotation time slots may limit your options.

**Military Match:** Military rotations are usually set up in January by contacting the program directly via email. Contacts are updated on the MODS (Medical Operational Data System) website at <https://www.mods.army.mil/>.

**Latecomers:** Consider following up with programs that may not have initially offered a rotation position, as open spots may become available with late cancellations from other students. You can also utilize the spot availability indicator filter on EMRA Clerkship Match.

## How Do I Apply for Away Rotations?

Most applications can be completed through the AAMC's VSLO system. Approximately 70% of clerkships on EMRA Clerkship Match participate in VSLO.<sup>6</sup> Visit the VSLO website to create an account and receive specific instructions regarding the application process.

Application requirements may vary slightly across programs. In general, materials you should gather before applications open include:

- An updated CV
- Personal statement/letter of intent
- Professional photograph
- Proof of USMLE Step 1/COMLEX Level 1 completion
- Medical school transcript
- A letter of recommendation from an EM advisor\*
- Proof of positive vaccine titer response
- Immunization record
- Proof of BLS and/or ACLS certification
- A certified background check and drug screen\*\*
- N95 respirator fitting

This list is by no means exhaustive, as some programs require institution-specific paperwork and/or training. To best prepare, an applicant can often look at previous years' requirements if still on VSLO or on the program's website to have a better sense of what a specific program may require.

*\*Some rotations will ask for a letter of recommendation from an EM advisor. Do not stress out if you have not worked in the ED yet — this does not need to be someone you've worked with, just someone who knows you're serious about pursuing a residency in EM.*

*\*\*Some institutions, but not all, will ask for a new, certified background check and/or a drug screen. As they are not universally required, you should review individual requirements specified by your desired institutions.*

**IMG Candidates:** International students will also want to consider their visa status when applying for clerkships. International students can use EMRA Match to find clerkships that are open to IMGs and residency programs that will sponsor visas.

Some of the proposed materials are more difficult to plan for submission than others. For instance, not every applicant will have taken Step 1/Level 1 by the time applications open. However, on EMRA Clerkship Match, 89.9% of programs require a Step 1/Level 1 score for consideration of a rotation spot — with 44.4% of programs specifically requiring Step 1 and 45.5% accepting a Level 1 passing score in place of Step 1.<sup>6</sup> With the recent transition of both Step 1 and Level 1 to pass/fail, we anticipate an increase over the next few years regarding the number of programs that accept Level 1 instead of Step 1 for osteopathic students. However, if specifically required by your desired rotations, it is worth considering taking Step 1 to have a score report by the time VSLO opens.

**At-Risk Candidates:** If you did not pass Step 1/Level 1, please speak to your dean and advisor for further recommendations.

## Clerkship Application & Vaccination Timeline

Proof of positive vaccine titer response is another component that requires advanced planning. Timing is important here, as any negative titer results will require a booster and a designated waiting period for antibody response. **Be prepared!** Do not let this requirement delay you from submitting applications. While most clerkships make use of the AAMC Standardized Immunization Form, which only requires Hepatitis B titers, some institutions that do not use this form may require MMR or varicella titers as well. To be safe, having all five drawn is advantageous, but that needs to be considered against your financial situation. Other testing and vaccinations to consider include being up-to-date on the

influenza vaccine and having documentation of a recent two-step tuberculin skin test (aka PPD) or QuantiFERON Gold test. Also, consider institutions' requirements regarding COVID-19 proof of vaccination.

**IMG Candidates:** A small population of candidates may have received the Bacille Calmette-Guerin (BCG) vaccine outside of the United States and subsequently tested positive on their PPD. For healthy, asymptomatic applicants, proof of Isoniazid (INH) completion and a recent normal chest X-ray report should suffice. However, in rare instances, these candidates may be asked to undergo additional testing.

A proposed timeline for gathering documents and having titers drawn is listed. This will allow you to apply to a few programs that begin accepting applications in February. Most programs may not accept rotation applications until March or April, however, so it is important to visit VSLO and plan on an individual basis.

### **November**

- Get titers drawn. If any are negative, immediately get a booster. Titers typically may not be re-drawn for 6–8 weeks.

### **December**

- Update your CV and choose an appropriate professional photograph
- Gather other previously mentioned documents as time permits
- Visit program websites to research programs
- Ask an EM advisor for a letter of recommendation, if required by desired rotations

### **January**

- Complete background check, if necessary
- Establish and execute a firm plan for up-to-date TB testing
- Have titers redrawn (if necessary and not already completed)
- Write your personal statement/letter of intent for the programs that require it

### **February–April**

- Submit VSLO application(s) as soon as each program accepts submissions

Not all clerkship programs use VSLO, which attempts to standardize the process, but they will in general have similar requirements. Find specific rotation requirements and instructions at individual program's websites outside of VSLO.

**Latecomers:** Targeting applications towards programs that do not utilize VSLO in an effort to secure a rotation may increase your chances of success, as these programs may receive fewer overall applications compared to programs available on the VSLO platform.



## How Do I Get Accepted for an Away Rotation?

Expert opinion recommends that an average student applies to 5–7 institutions to receive 1–2 invites. Be cautious in over-applying for EM away rotations. A recent study in 2022 showed that EM-bound students, as a whole, received one away rotation offer for every 4-5 applications submitted.<sup>12</sup> DO candidates submitted twice as many applications as MD candidates while experiencing a similar rate of offers received. Peer influence, peer online advising networks, and self-assessment were the most often reported causes of increased applications.<sup>12</sup> Consult with your advisor to determine the right number of applications for your personal situation and goals.

In general, clerkship directors value genuine student interest in matching at their program or region. In the current application environment, however, a common sentiment is that student interest is hard to gauge. If a program requests a statement of interest, this can be a great opportunity to communicate your particular interest in the region and the program. Local ties, for example, are valuable to mention.

Personal, direct communication to the clerkship director or coordinator, beyond the letter of interest requested by the application, may be helpful in some cases but detrimental if overused. Reach out through direct communication judiciously, reserving it only for a few institutions (maximum of three) in which you are most interested.

Your home institution can also help you secure an away rotation if you communicate specific interests. It is acceptable to want to leave your home institution for residency training. Many programs, especially those with a large cohort of EM-bound medical students, will appreciate that disclosure. In that case, your home institution may have faculty connections to a particular region who can help you secure a rotation. Again, overuse of this strategy will also dilute its effect.

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*In general, clerkship directors value genuine interest in matching to their program or region. Be specific and detailed about why you want to rotate at their program.*

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**Latecomers:** Contact your home EM advisor directly and as soon as possible once you decide to pursue EM, as they can be an invaluable resource of experience and connections in your effort to complete application requirements.

Attendance at conferences and other networking opportunities may be helpful. National conferences, such as ACEP's Scientific Assembly in the fall, are a great opportunity to network face-to-face. EMRA hosts an ongoing array of both virtual and in-person opportunities for students. The Medical Student Forum is held twice a year in the spring and early fall, so attendees will have enough lead time ahead of VSLO applications to establish a network, follow up, and apply. You can learn more about programs and make connections at EMRA's fall residency fair, but it is important to recognize attendance does not guarantee an away rotation. This is especially true for students attempting to secure a rotation or interview at more competitive institutions.

## Troubleshooting & Tips

### How do I deal with conflicting home requirements and away rotation schedules?

- Address it early with the dean of your home institution or contact the away rotation clerkship director. Some institutions will make exceptions or help you troubleshoot. Asking for an exception implies genuine interest. Reserve this only for rotations you would almost certainly accept if offered.

### I do not have EM faculty at my institution. Where can I find individualized advice?

- Find an EM faculty mentor at an outside institution willing to advise you. This is especially important for osteopathic and international students. Often, this may be the clerkship director who “adopts” you on your first away rotation. CORD can also connect you to an advisor via [distanceadvising@cordjobboard.com](mailto:distanceadvising@cordjobboard.com). EMRA coordinates a student-resident mentorship program at [www.emra.org/students/advising-resources/student-resident-mentorship-program/](http://www.emra.org/students/advising-resources/student-resident-mentorship-program/).
- EMRA understands the cost and potential low yield of traveling far distances just to obtain good but generalized advice. In response, through **EMRA Hangouts**, it hosts live, online forums featuring prominent EM advisors once each month to answer timely questions. Sessions are recorded and posted at [www.emra.org/be-involved/events--activities/emra-hangouts/](http://www.emra.org/be-involved/events--activities/emra-hangouts/).

**I couldn't secure an away rotation at a program I was very interested in. How can I still show interest and learn more about the program?**

- Often, institutions will offer away rotations in a subspecialty area of emergency medicine. A subspecialty SLOE from these rotations is less influential than a categorical EM rotation eSLOE, but a strong performance may resonate with that specific program — and you will gain valuable knowledge, a new skill set, and familiarity with the institution. Common subspecialty rotations include EMS, global health, pediatric EM, research, toxicology, ultrasound, and wilderness medicine. These subspecialty rotations can be identified using the filter included in **EMRA Clerkship Match**.

**What if I don't get or can't do an away rotation?**

- While away rotations have many practical benefits, they also pose difficult hardships and may not be feasible for some students. Parenthood and pregnancy are two such situations that may constrain the ability of one or both partner(s) to travel far from home. Family illness and caregiver needs may affect others. In general, EM programs are sensitive to work-life balance and personal wellness. Nevertheless, these situations require a thoughtful approach to your communication with programs.
- If you're in this situation, it's most important to have a trusted, experienced advisor help you develop a plan. Complete an additional EM subspecialty elective at your home institution. The ideal elective would give you an opportunity to demonstrate your clinical skills to EM faculty who could then write an additional faculty-only SLOE. Finally, you should thoughtfully and deliberately explain the reason for being unable to complete a traditional away rotation — this communication should be part of the plan you develop with your advisor and be included in your ERAS personal statement.

**I accepted an away rotation, but then I received an invitation from my top-choice program. Is it OK for me to cancel my original rotation?**

- Yes, but please be considerate when canceling an away rotation. If the rotation is several months out, such that the program can accommodate another student, then a cancellation is typically understandable and should be accompanied by polite and honest communication.
- **Last-minute cancellations of away rotations are strongly discouraged and will be frowned upon** — with the exception, of course, of personal emergencies.

## THE BOTTOM LINE

- ✓ Your EM rotations should be affiliated with an EM residency program so you can obtain a group eSLOE.
- ✓ With rare exceptions, EM candidates should complete two EM rotations to acquire a total of two eSLOEs. If available, one of your two rotations should be a home rotation.
- ✓ You should have a minimum of one eSLOE by the time residency programs can view applications in ERAS (mid-September) to be considered for interview invitations. Having two eSLOEs submitted by this time will maximize your competitiveness.
- ✓ It is highly unusual for an applicant to require three eSLOEs to match, and it does not necessarily make you more competitive. In fact, doing extra away rotations may be harmful to your colleagues who are having difficulty obtaining their first away rotation.
- ✓ VSLO is the standard way to secure away rotations, but there are other ways that will require more personal inquiry. In general, current expert opinion suggests you should apply to 5-7 clerkships to get 1-2 invites. Consult with an advisor to confirm an application strategy that supports your personal situation.

# Crush Your EM Clerkships, Secure Your SLOEs

**Three years of hard work have flown by**, and you have earned the opportunity to explore EM and demonstrate your skills during your EM clerkships. Two of the most important factors of your application, your clerkship grades and your eSLOE, are a result of your rotation performance. These factors carry significant weight in how most programs determine interview invitations and rank order list positions. You're about to begin your EM rotation, and you have one burning question:

## What can I do to stand out and make a positive impression during my clerkship?

First, remember some basic practices that may seem small but in reality will be the foundation of your performance.

- **Be on time.** Even better, be early. Showing up late to a shift or didactic session is unprofessional and demonstrates a lack of enthusiasm. If you need to miss a day or will be late, notify your clerkship director as soon as possible. During an away rotation, figure out the commute time from your housing to your clinical site before your first day.
- **Dress appropriately.** Ask how you are expected to dress (scrubs, business casual, white coat, etc.) on shift, during conferences, and in didactic sessions.
- **Be (appropriately) enthusiastic.** Your enthusiasm for learning will be noticed quickly and much appreciated. It will also help you get the most out of your rotation.
- **Come prepared.** Make sure to bring your stethoscope, trauma shears, and a pen (or two!) to every shift. Also, consider having handy pocket EM guides or medical apps on your phone for quick references on shift. We've included some suggestions later in this chapter.

Next, remember that you are an important member of the team. Your evaluations and plans matter, even if at times you feel they don't. Along with the nursing

staff, you will often be the first person to meet patients. You will also usually be the person spending the longest time with the patient. Therefore, your history and physical will be instrumental in creating the plan moving forward.

**IMG Candidates:** Non-native English speakers will need to demonstrate mastery of the English language to show they can communicate well, both with patients and other members of the care team.

Preparing for a Successful Clerkship

It’s important to build your fund of EM-specific knowledge. This occurs before, during, and after clinical rotations. Take advantage of the many resources available to you — as you prepare for, during, and after you crush your clerkships.

TABLE 6.1. Guidance for EM Learners

CLERKSHIP PREPARATION RESOURCES

|  |  |
|--|--|
| <b>CDEM EM Clerkship Primer</b><br>(downloadable PDF)  | Detail-oriented “how to” manual to think like an emergency physician, focused on aspects of EM that are often overlooked or underrepresented in traditional textbooks  |
| <b>The 3-Minute Emergency Medicine Medical Student Presentation: A Variation on a Theme</b> (downloadable PDF) | Article discussing the characteristics of patient presentations in emergency medicine  |
| <b>Patient Presentations in Emergency Medicine</b> (video)   | Training video created by EMRA and CDEM to help provide learners with instruction on how to present patients in the unique ED environment  |
| <b>Effective Consultation in Emergency Medicine</b> (video)  | Training video created by EMRA, CDEM, and CORD to help provide learners with instruction on how to speak to consultants using the “5Cs of Consultation,” a validated model                                   |
| <b>Transitions of Care</b> (video)   | Training video created by EMRA, CDEM, CORD, and SAEM to help provide learners with instruction on how to give safer and more effective handoffs using the I-PASS mnemonic as a structured communication tool |
| <b>Skill Demonstration Videos</b> (online)   | EMRA Education Committee approved list of videos that demonstrate the proper and safe technique for ED procedures  |
| <b>CDEM Basic Wound Management</b> (online)  | Learning module that covers the evaluation and treatment of wounds with accompanying videos from the VIPER series of ALiEM   |
| <b>Rosh Review</b> (question bank) \$  | Question bank of 500 NBME style questions to help prepare for the EM shelf exam  |

## ON-SHIFT RESOURCES

|  |   |
|--|---|
| <b>EMRA Basics of Emergency Medicine and Basics of EM: Pediatrics</b> (printed pocket guide) * | Clinical guide that will help learners build a differential and assemble a treatment plan efficiently and quickly. This pocket-size resource focuses on nearly two dozen of the most common chief complaints seen on shift. |
| <b>EMRA EM Fundamentals</b> (printed pocket guide) *   | Comprehensive reference manual with quick guides, can't-miss diagnoses, warning signs, and common treatments for a broad range of conditions  |
| <b>EMRA Stepwise Approach to ECG Interpretation</b> (printed pocket card) *                    | Tri-fold pocket reference to help shore up your fundamental approach to ECG interpretation  |
| <b>MobilEM</b> (phone application) \$  | App that features all of EMRA's most high-yield on-shift guidance, from the EMRA Antibiotic Guide to the newest module with tips for difficult conversations  |
| <b>Ottawa's Clerkship Guide to Emergency Medicine</b> (downloadable PDF)                       | Student-driven handbook that offers background, assessment, investigations, and management for common chief complaints  |

\* Available for free as part of the new member kit when joining EMRA

\$ Must purchase separately

## GENERAL LEARNING

|   |   |
|---|---|
| <b>ALIEM Bridge to EM</b> (online)                        | 8-week curriculum to help tackle the transition from M4 to EM intern (free for EMRA members)  |
| <b>CDEM M3 Curriculum</b> (online)                        | Learning modules designed to expose students to core EM concepts  |
| <b>CDEM M4 Curriculum</b> (online)                        | Learning modules to prepare learners to address common chief complaints in 10 categories  |
| <b>CDEM Peds EM Curriculum</b> (online)                   | Learning modules created as an addition to the original CDEM Curriculum for learners seeing pediatric emergency department patients |
| <b>Best Podcasts for the Student EM Nerd</b> (podcasts)   | Curated list of audio resources specifically for the budding emergency physician, organized for beginner and advanced learners      |
| <b>Life in the Fast Lane (LITFL) EKG Library</b> (online) | Educational resource covering basics of EKG interpretation and over 100 EKG topics relevant to Emergency Medicine                   |

You might feel like there's an overwhelming number of resources; test several of them before your clerkship and use the ones you feel most comfortable with.

## Interacting with Patients

While you're brushing up on the clinical aspects of patient care, don't forget the patient. It's important to establish rapport quickly, but that can be challenging when you're approaching a stranger who's experiencing a problem grave enough to lead them to the ED. Follow some basic steps:

- Introduce yourself to the patient, and explain your role as a medical student.
- Find out who is accompanying them (**do not make assumptions**).

- Ask why they're in the ED today. For chronic conditions, find out what made today different than any other day, and research prior treatments.
- Determine if they've had any prior work-up relevant to today's visit and where these records can be located.
- Inquire about their access to follow-up care.
- Small things go a long way with patients and their visitors: Does the patient need a warm blanket? A phone to call their loved one? Does their visitor need a chair?
- If your initial impression is the patient is unstable, agitated, or altered, you are probably right, and in such instances, get your resident or attending immediately to evaluate the patient.

## Presenting a Patient

Your oral presentation to your attending is critical in demonstrating your knowledge of a patient's complaint, exam, and management plan. But a patient presentation in EM is unique. The pace of the ED environment demands extremely succinct presentations that may be interrupted at any given time — be thorough yet brief, and be ready to pick up where you left off after any interruptions. Focus your presentation to include the patient's chief complaint and any information relevant (positive or negative) to the complaint, also noting relevant exam findings. Then, present your differential diagnosis, prioritizing the most emergent diagnoses, and discuss your anticipated management plan. While presenting your plan, consider including any consultations you might need and anticipated final disposition if it is apparent. Be ready to answer any additional questions about the history and physical exam, but this does NOT mean you need to present every detail initially; stick to what you know is relevant to the chief complaint.

## Developing a Strong DDx and Plan

Your differential diagnosis (DDx) should be based on your history and physical exam. Do not rattle off a random assortment of diagnoses, as this reflects poorly on your medical decision making. Do include all emergent diagnoses in your differential, even those that are less likely or don't require further work-up, to demonstrate to your evaluator that you've considered all possibilities. **A good framework to organize your differential order is SPIT:<sup>1</sup>**

- **S**erious
- **P**robable
- **I**nteresting
- **T**reatable



Utilize your differential to decide which labs, imaging, and interventions are needed. Familiarize yourself with the clinical prediction rules your supervising resident or attending will consider when determining what work-up is necessary, such as the HEART Score for ACS, the Wells' and PERC scores for PE, the Canadian CT Head rule for trauma, etc. Of note, MDCalc is a great central location to find all these decision-making tools!

Be ready to discuss your anticipated disposition for the patient, including what type of follow-up they might need. If you don't verbalize your thinking, your supervisor won't know what you've considered and won't be able to give you meaningful feedback on your presentations. Expect to be quizzed after you present your differential and plan. These questions are not casting doubt on your competence, but rather they enable your evaluator to understand your thought process and provide an opportunity to strengthen or modify your plan.

**NEVER LIE.** If you didn't ask a question about a patient's history, forgot to check for something during your physical exam, or didn't consider a specific diagnosis when generating your differential, **absolutely do not lie!** It takes time to gain the trust of your supervisor, but that trust can evaporate quickly. When you are open and honest about what you did or didn't do, it assures that the rest of your presentation is honest and accurate. You can always go back into a patient's room to collect the missing information. But if there is even a hint that your presentation was not honest, it creates more work for your supervisors because they must start with a blank slate.

**DON'T OVERREACH.** There's a first time for every procedure — when that's the case, simply let your supervising physician know you've never performed the procedure, but you would like to learn and practice. Similarly, if you are asked a question you cannot answer, say you don't know, and then go find an answer. Admitting you don't know something doesn't show incompetence, it demonstrates humility — patients and attendings alike will respect this.

**“OWN” YOUR PATIENTS.** Depending on your rotation and electronic chart access, this can be difficult. In general, you should stay on top of lab/imaging results and recognize their relative impact on care. For example, if a urinalysis comes back suggesting UTI, reporting this to the resident/attending and suggesting an appropriate antibiotic choice and disposition would be excellent care. Remember — anyone can report abnormal findings, but the real question is what to do with those findings.

Ownership also includes updating patients with plans and results and managing their expectations for their visit. This is easier for you as a student, simply because you'll have more time than your resident/attending. Show ownership by reassessing after interventions (eg, the nauseous patient no longer vomiting after receiving antiemetics) and re-evaluating physical exams as needed (eg,

serial abdominal exams). Furthermore, inform your attending of any status updates with your patients, reassessments, or results. You are often the best eyes and ears for your attending. Recognizing a critical change or “sick” patient and immediately alerting the ED team of this will always garner respect.

If given tasks to complete (notes, consults, procedures) do them promptly and inform your supervising resident or attending when you’re finished. If you encounter difficulty, that’s okay — just let the team know. If you have completed all tasks for a patient, you can demonstrate initiative by asking to pick up another patient. However, be sure not to pick up so many that you fall behind. You will impress your attending far more by providing thorough, complete care to fewer patients than by superficially involving yourself with a lot of patients.

**GROW.** As you become more comfortable in the ED, challenge yourself to pick up one more patient than your prior shift, still being sure not to get overloaded. Set an alarm or timer for your history and physical exams to practice becoming more efficient, without cutting corners. For patients undergoing procedures, familiarize yourself with the steps of the process and the supplies needed, and express an interest in performing or assisting whenever possible.

**TALK TO YOUR TEAM.** Check in with your supervisor at the start of every shift. Introduce yourself and identify their expectations and responsibilities. These may change from attending to attending, shift to shift, and it’s important to recognize these differences. Examples of these are: Should you assign yourself to the next patient or should you ask permission before assigning yourself to new patients? Should you present before or after writing your note? Are you responsible for writing your own orders?

Clear communication at the beginning of each shift also enables you to show that you are engaged with specific goals. For example, “*Today my specific goal is to work on X, and I’d love feedback on it.*” At the end of the shift follow up on this goal and seek constructive criticism.

Lastly, communicate with the entire team (attendings, residents, nurses, consultants, health unit coordinator, techs, etc.) respectfully and pleasantly. Learn their names. Let them know you are there and eager to be a part of patient care. This allows them to show you interesting cases, teach you procedures, and include you throughout the course of your shift.

**ASK QUESTIONS.** If you are unsure about something, ask! Asking questions reflects an interest in learning and demonstrates you are thinking about your patient’s presentation. Remember, we know you’re a medical student and you’re here to learn. It’s our responsibility to educate medical students, and most teaching departments work to foster learning. Of course, there is a balance —

before asking a question, consider looking up the answer to your question and be ready to discuss possible management strategies. A good way to phrase this (and demonstrate self-motivation) is, “I have a question regarding the management of X. I’ve read that we can do Y, however, I was wondering if that’s the appropriate course in the setting of...” Also, make sure to “read the room” before asking a question. Unless your question involves an emergent issue, certain times in the ED may not be appropriate for discussions and feedback (eg, during sign-out, while the team is taking care of a critically ill patient, etc.).

If you are unsure about something (how to call a consult, discharge a patient, etc.), ask your attending or team members. In general, we recommend asking residents first, as sometimes the attending is managing multiple other tasks.

**ACE THE FINAL EXAM.** Depending on your rotation site, you may take an exam created by that department or by a national organization. Be sure to inquire about what resources are recommended for preparation (readings, practice questions, etc.). Free and fee-based question banks are widely available. Do some reading, flashcards, and practice questions each day to build your knowledge base and prepare for the exam.

**ATTEND CONFERENCE.** Many sites integrate this into your clerkship schedule. However, if not, ask if you can attend weekly resident conferences. Your interest will be noticed, and it will allow you to see what’s new in EM, get to know more of the residents, and see what your weekly educational experience would look like if you match at that program.

**BE KIND.** Think of your clerkship as a month-long interview, remembering that your interactions with everyone, from attendings and residents to ED staff to the residency coordinator, will be noted. Be unfailingly kind, courteous, and professional.

**LOOK AHEAD.** Clerkships are the perfect chance to build your professional network by meeting attendings, residents, and administrators and connecting with other students who are rotating with you — because they could be one of your fellow residents next year. Along the same lines, get to know the city where you’re rotating; can you see yourself living there? Finally, find out upfront whether an interview will be offered at the end of your clerkship — this data is also available in EMRA Clerkship Match.

Remember that while you’re continually being graded during your clerkship, this is also your opportunity to evaluate the program. Do you like the atmosphere, the residents, the attendings, and the opportunities? These rotations will be the basis for how you evaluate each program where you interview.

## Demystifying the eSLOE

Now, let's look at the criteria you will be evaluated on from that dreaded (mysterious?) eSLOE. Why is this important? Program directors have ranked eSLOEs (and rotation grades) as some of the most important criteria when looking at selecting potential residents.<sup>2</sup> Therefore, understanding the eSLOE provides insight into how you will be formally evaluated. In 2022, the eSLOE was updated — see figure 6.2 for an example of the updated eSLOE. Review the eSLOE form before your EM rotation to understand the characteristics by which you will be judged.

**The updated eSLOE has seven sections:** In the “Demographic Data” and “Background Information” sections, programs outline the sources of information they used in compiling the eSLOE and the primary letter authors’ nature of contact with the applicant — see figure 6.2 to see all the possible options in these sections. These first sections also include information on when the applicant rotated with the program, what grade was given, how the student’s grade compares to others in the prior academic year, and if there was an exam taken during the rotation how the applicant’s grade compares to their peers.

**“Evaluation of Student: Part A”** is a competency-based evaluation, which means students are NOT compared to their peers. “Part A” is based upon the National Clinical Assessment Tool for Medical Students in EM domains — see figure 6.3 for an example of the NCAT-EM, with entrustability anchor descriptions. Students are evaluated on their entrustability in the following areas:

1. Ability to perform a focused history and physical exam
2. Ability to generate a differential diagnosis
3. Ability to formulate a plan
4. Ability to perform common ED procedures
5. Ability to recognize and manage basic emergent situations

**“Evaluation of Student: Part B”** is norm-referenced (how the student compares to his/her/their peers who are also applying to EM), using a 1-5 rating scale (with 5 being the best and 1 being minimally acceptable for an EM resident), in the following areas:

1. Compassion, sensitivity, and respect towards patients and team members
2. Receptivity to feedback and ability to incorporate feedback
3. Dependability, responsibility, initiative, and work ethic
4. Punctuality, attendance, and preparation for duty

5. Timeliness and responsiveness in completing administrative tasks
6. Interpersonal and communication skills with patients and family members
7. Interpersonal and communication skills with faculty, residents, and health care professionals

**“Evaluation of Student: Part C”** is also norm-referenced and asks how much guidance programs anticipate the student will require to become clinically proficient and meet EM residency graduation requirements. The following are options:

- **Minimal:** Will excel with just a little guidance and support.
- **Standard:** No problems expected, will succeed with standard guidance and support.
- **Moderate:** May need slightly more than the standard support from time to time, no major issues anticipated.
- **Most:** Has the potential to succeed, but will likely require extra support throughout residency.

In this section, we anticipate the majority of students should fall into the standard guidance category. While you cannot see your eSLOE, if feedback from your rotations and/or your final clerkship grades indicate you might fall into moderate or most guidance categories, you should reach out to your EM-specific advisor for guidance.

“Evaluation of Student: Part C” also asks how highly the program estimates the student will reside on their rank list: Top 10%, Top ⅓, Middle ⅓, Lower ⅓, or Unlikely to be on their rank list. Programs can select what criteria they are basing this rank list position on — see figure 6.2 to see all the possible options programs can select. As a reminder, before late September when ERAS opens to programs for review, programs do not have access to your entire ERAS application at the time they submit your eSLOE. Thus, there are other items (such as eSLOEs from other programs, your Dean’s Letter/Medical Student Performance Evaluation, Step 2 score, etc.) that might affect your rank list position, and this is an estimation of the rank list position at the time the eSLOE is written and submitted — it is always subject to change later in the application/interview season.

The **“Written Comments: Part D”** section asks programs to summarize the student’s overall candidacy, providing detail on strengths, explaining growth opportunities or lower ratings from the other sections, and highlighting anything else they feel other programs should know about the student.

Finally, **“Institutional Information: Part E”** allows the program to put information about their trauma center designation, annual ED patient census, and any other pieces of information regarding their rotation that they deem important or necessary for other programs to know about.

At the end of the day, the eSLOE provides other programs insight into your perceived professional/personal strengths and areas that might need focused attention during residency, and it enables writers to highlight both as they feel necessary.

### **Whom do I ask for my SLOE?**

Most programs have a plan in place for rotators to obtain an eSLOE. Some rotations will say who will handle the eSLOE at the clerkship orientation, whereas others will have students formally ask. Typically you will ask the clerkship director to complete your eSLOE. However, some clerkships will ask you to obtain an eSLOE from the faculty who knows you best. If this is the case, try to identify a faculty member early on in the rotation. Many academic departments complete a “departmental eSLOE” — a jointly signed letter from the clerkship director, program director, and associate program directors, which carries more weight than an eSLOE written and signed by a single faculty member.

Clarify the process by which you will obtain your eSLOE on the first day of your rotation.<sup>3</sup> Importantly, it is expected that you will have an eSLOE from each site at which you rotated. Not having an eSLOE will be perceived as a red flag and may require an explanation if you are invited for an interview. An exception to this is rotations that are scheduled later in the application cycle. If you have already submitted two eSLOEs and you are completing a third EM rotation later in the year (eg, December), you do not necessarily need to obtain an eSLOE from this rotation.

**FIGURE 6.1. Official CORD eSLOE, 2022-2023 Application Season**

I have read this year's instructions @ cordem.org ☐ Yes ☐ No

Applicant's Name: \_\_\_\_\_ AAMC ERAS ID No. \_\_\_\_\_

Evaluator Institution: \_\_\_\_\_ Evaluator Contact: \_\_\_\_\_

Evaluator Name(s): \_\_\_\_\_ Student Type: \_\_\_\_\_

**What sources of information did you use in compiling this SLOE?**

- ☐ Formal written clinical assessments from residents
- ☐ Formal written clinical assessments from faculty
- ☐ Informal/verbal comments from residents
- ☐ Informal/verbal comments from faculty
- ☐ Performance in nonclinical activities (didactic sessions, simulations, etc.)
- ☐ Performance in nonclinical assessments (OSCE, written exam, final presentations)
- ☐ Feedback from administrative or interprofessional staff

**Background Information**

In addition to the student's EM clinical rotation, what are the primary letter authors' nature of contact with this applicant?

- ☐ Advisor ☐ EMIG ☐ Research mentor ☐ Other (explain)

Rotation dates: \_\_\_\_\_

Did your grading scheme change from the past academic year? (Y/N)

Grading Scheme: (H/HP/P/F) Grade received: \_\_\_\_\_

Grades Breakdown % Last Year: (H/HP/P/F) # Students Last Year: \_\_\_\_\_

Rotation Exam: \_\_\_\_\_ Exam Grade: \_\_\_\_\_ Avg Exam Grade: \_\_\_\_\_

**Evaluation of Student: Part A**

The following questions are a criterion-referenced assessment, meaning it pertains to the student's overall competency compared to a set metric, which in this case is the readiness to begin an emergency medicine residency program. Please note this is NOT a comparison to peers. Indicate where this student stands in terms of readiness to be an incoming EM intern.

**1. Ability to perform a focused history and physical exam:**

- ☐ Fully entrustable ☐ Mostly entrustable ☐ Pre-entrustable

**2. Ability to generate a differential diagnosis:**

- ☐ Fully entrustable ☐ Mostly entrustable ☐ Pre-entrustable

**3. Ability to formulate a plan:**

- ☐ Fully entrustable ☐ Mostly entrustable ☐ Pre-entrustable

**4. Ability to perform common ED procedures:**

- ☐ Fully entrustable ☐ Mostly entrustable ☐ Pre-entrustable

**5. Ability to recognize and manage basic emergent situations:**

- ☐ Fully entrustable ☐ Mostly entrustable ☐ Pre-entrustable

### Evaluation of Student: Part B

Please rate the student in the following areas using a rating scale (LEFT side = best candidate I've seen, RIGHT side = minimally acceptable for an EM resident). Note: Your average ratings for the year should typically look like a bell-shaped curve distribution. If you select the far left or far right side of the scale, please discuss this in our narrative feedback in Section D.

#### 1. Compassion, sensitivity, and respect toward patients and team members

|                          |  |                                      |                                |
|--------------------------|--|--------------------------------------|--------------------------------|
| Exceptional EM candidate | 5 4 3 2 1  | Minimally Acceptable for EM Resident | Not Acceptable for EM Resident |
|                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |                                      |                                |

#### 2. Receptivity to feedback and ability to incorporate feedback:

|                          |  |                                      |                                |
|--------------------------|--|--------------------------------------|--------------------------------|
| Exceptional EM candidate | 5 4 3 2 1  | Minimally Acceptable for EM Resident | Not Acceptable for EM Resident |
|                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |                                      |                                |

#### 3. Dependability, responsibility, initiative, and work ethic:

|                          |  |                                      |                                |
|--------------------------|--|--------------------------------------|--------------------------------|
| Exceptional EM candidate | 5 4 3 2 1  | Minimally Acceptable for EM Resident | Not Acceptable for EM Resident |
|                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |                                      |                                |

#### 4. Punctuality, attendance, and preparation for duty:

|                          |  |                                      |                                |
|--------------------------|--|--------------------------------------|--------------------------------|
| Exceptional EM candidate | 5 4 3 2 1  | Minimally Acceptable for EM Resident | Not Acceptable for EM Resident |
|                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |                                      |                                |

#### 5. Timeliness and responsiveness in completing administrative tasks:

|                          |  |                                      |                                |
|--------------------------|--|--------------------------------------|--------------------------------|
| Exceptional EM candidate | 5 4 3 2 1  | Minimally Acceptable for EM Resident | Not Acceptable for EM Resident |
|                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |                                      |                                |

#### 6. Interpersonal and communication skills with patients and family members:

|                          |  |                                      |                                |
|--------------------------|--|--------------------------------------|--------------------------------|
| Exceptional EM candidate | 5 4 3 2 1  | Minimally Acceptable for EM Resident | Not Acceptable for EM Resident |
|                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |                                      |                                |

#### 7. Interpersonal and communication skills with faculty, residents, and team members:

|                          |  |                                      |                                |
|--------------------------|--|--------------------------------------|--------------------------------|
| Exceptional EM candidate | 5 4 3 2 1  | Minimally Acceptable for EM Resident | Not Acceptable for EM Resident |
|                          | <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> <input type="checkbox"/> |                                      |                                |

### Evaluation of Student: Part C

The following question is norm-referenced, meaning it pertains to how the student compares to peers who are also applying to EM residency programs. Compared to the candidates for whom your program wrote a SLOE last year, how much guidance do you anticipate the candidate will need to become clinically proficient and meet graduation requirements?

- ☐ **Minimal:** Will excel with just a little guidance and support
- ☐ **Standard:** No problems expected, will succeed with standard guidance and support
- ☐ **Moderate:** May need slightly more than standard support from time to time, no major issues anticipated
- ☐ **Most:** Has the potential to succeed, but will likely require extra support throughout residency

Are you on the final committee that determines the rank list? (Y/N)

How highly would you estimate the candidate will reside on your rank list?

☐ Top 10%   ☐ Top 1/3   ☐ Middle 1/3   ☐ Lower 1/3   ☐ Unlikely to be ranked

Number recommended in each category last year:

Top 10%: \_\_\_\_\_ Top 1/3: \_\_\_\_\_ Middle 1/3: \_\_\_\_\_ Lower 1/3: \_\_\_\_\_ Unranked: \_\_\_\_\_



You are estimating the rank list position based on EM student rotation PLUS:

- |   |   |
|---|---|
| <input type="checkbox"/> USMLE/COMLEX scores    | <input type="checkbox"/> Shelf exam scores                  |
| <input type="checkbox"/> Administrative hygiene | <input type="checkbox"/> Honors/awards                      |
| <input type="checkbox"/> Clerkship grades       | <input type="checkbox"/> Overall medical school performance |
| <input type="checkbox"/> Leadership positions   | <input type="checkbox"/> Research                           |
| <input type="checkbox"/> CV                     | <input type="checkbox"/> Resident input                     |

#### Written Comments: Part D

Please concisely summarize this applicant's overall candidacy, providing detail on strengths, explaining growth opportunities or lower ratings from above, and highlighting anything else you feel like we should know about this student (limit your text to 350 words or less).

#### Institutional Information: Part E

This rotation is based out of a trauma center with which designation?

What is the annual ED patient census at this site?

Please concisely summarize any pieces of information regarding your rotation that you deem important or necessary. You may also include information regarding any special circumstances surrounding this rotation, such as changes related to COVID, institutional changes, school changes, etc. (limit your text to 350 words or less).

STUDENT HAS WAIVED RIGHT TO SEE THIS LETTER (Y/N)

## End-of-Shift Feedback/Evaluations

While the eSLOE is a summary evaluation of your performance for your entire rotation, it is crafted based on the cumulative feedback/evaluations you receive for each shift. Students should determine who will be evaluating them at the end of each shift — will it be an attending, a senior resident, or both?

While you are being evaluated and graded continually by the faculty and upper-level residents during your clerkship, you should not be a passive bystander. Seek feedback early and often — even if that means waiting for your supervising resident or attending to finish signing out (while being respectful of their time). Be prepared to explain what you think you did well, what you would do differently, and how you plan to improve on the next shift.

In addition to familiarizing yourself with the contents of the eSLOE, you should also familiarize yourself with the end-of-shift evaluation tool that will be used to judge your performance. Many clerkships have adopted the NCAT-EM to provide standardized evaluation across institutions, calculating a final grade by averaging NCAT-EM scores from at least six shifts. The NCAT-EM evaluates a student's performance in six clinical performance domains, along with an assessment of the student's professionalism during a shift (see figure 6.3).<sup>4</sup>

**FIGURE 6.2. National Clinical Assessment Tool for Medical Students in EM (NCAT-EM)**

|                |  |             |  |  |
|----------------|--|-------------|--|--|
| Student Name:  |  | Date:       |  |  |
| Assessor Name: |  | Shift/site: |  |  |

|  | Pre-Entrustable   | Mostly Entrustable   | Fully Entrustable/<br>Milestone 1   | Outstanding/<br>Milestone 2  |
|--|---|--|---|--|
| <b>Focused history and physical exam skills</b><br><br><input type="checkbox"/> Unable to assess                         | Extraneous or insufficient information. May miss key physical findings or examine incorrectly.  | Generally adequate information. Exam mostly adequate and correct. May not differentiate important from extraneous detail.  | Appropriate information for clinical context.<br><br>Exam complete and appropriately tailored. May include excess detail, but thorough and accurate.  | Exceptional focused H&P, obtains all relevant information. Addresses chief complaint and urgent issues. Differentiates important from extraneous detail.                     |
| <b>Ability to generate a prioritized differential diagnosis</b><br><br><input type="checkbox"/> Unable to assess         | Limited ability to filter, prioritize, and connect information to generate a basic differential based on clinical data and medical knowledge. | Generally able to filter and connect information to generate a basic differential based on clinical data and medical knowledge.<br><br>Beginning to incorporate data and prioritize. | Reliably synthesizes data into a complete differential.<br><br>Incorporates data. Prioritizes differential by likelihood.   | Demonstrates exceptional differential diagnosis and data interpretation. Uses all available information to develop a prioritized differential focusing on life/limb threats. |
| <b>Ability to formulate plan (diagnostic, therapeutic, disposition)</b><br><br><input type="checkbox"/> Unable to assess | Difficulty applying knowledge to formulate plans, or does not offer plan.   | Usually able to apply knowledge to formulate plans, though plans may be incomplete/incorrect in some details.  | Reliably able to apply knowledge to formulate plans that are complete, appropriate, and tailored to patient needs/desires.  | Exceptional ability to apply knowledge to formulate outstanding patient-centered plans.  |
| <b>Observation, monitoring and follow-up</b><br><br><input type="checkbox"/> Unable to assess                            | May not re-evaluate patients or follow up results in a timely fashion.  | Usually re-evaluates patients and follows up results, though may need prompting.<br><br>Beginning to integrate new data into ongoing plan.   | Reliably re-evaluates patients and follows up results in a timely manner without prompting. Integrates basic data into ongoing plan, though may need help. Completes tasks despite distraction. | Exceptional re-evaluation and follow up skills. Proactive. Integrates complex results into ongoing plan. Able to handle multiple patients simultaneously.                    |

|  | Pre- Entrustable   | Mostly Entrustable   | Fully Entrustable/<br>Milestone 1   | Outstanding/<br>Milestone 2  |
|--|--|--|---|--|
| <b>Emergency recognition and management</b><br><br><input type="checkbox"/> Unable to assess     | May not recognize or respond to abnormal vital signs or patient deterioration.<br><br>Delays or fails to seek help.<br><br>Unable to recommend stabilization interventions.  | Recognizes and responds to most abnormal vital signs but may miss subtle changes.<br><br>Promptly seeks help.<br><br>Recommends and/or initiates some basic stabilization interventions.   | Reliably recognizes and responds to all vital sign abnormalities and trends. Promptly seeks help.<br><br>Recommends and/or initiates all basic and some advanced stabilization interventions.   | Exceptionally attentive to vital sign abnormalities and patient deterioration. Promptly seeks help.<br><br>Recommends and/or initiates basic and advanced interventions appropriately.   |
| <b>Patient- and team-centered communication</b><br><br><input type="checkbox"/> Unable to assess | Communication with patients and/or team is unidirectional or not tailored to circumstances.<br><br>May not read or respond to others' emotions well. May not always attend to patient comfort or preferences.<br><br>May not always integrate well into team, may not recognize value of team contributions. | Communication with patients and/or team is bidirectional and usually tailored to circumstances.<br><br>Generally reads and responds to others' emotions well. Usually attentive to patient comfort and preferences. Usually integrates well into team, may not fully understand team roles or contributions. | Communication with patients and/or team is bidirectional and reliably tailored to circumstances. Skillful in reading and responding to others' emotions. Reliably sensitive to patient perspective and preferences. Integrates well into team and recognizes value of team members. | Demonstrates exceptional communication skills with patients and/or team. Effectively reads and negotiates complex emotional situations and conflicts. Always sensitive to patient perspective. Highly regarded by patients and team. |

| Professionalism:<br>Specific Attribute/Behavior      | Concerns? |    | Please describe specific behaviors observed |
|--|-----------|----|---|
|  | Yes       | No |   |
| Compassion, sensitivity, or respect towards patients |           |    |   |
| Respect or collegiality towards team members         |           |    |   |
| Receptivity to constructive feedback                 |           |    |   |
| Honesty or ethical conduct                           |           |    |   |
| Dependability, accountability, or responsibility     |           |    |   |
| Initiative, diligence, or work ethic                 |           |    |   |
| Punctuality, attendance, or preparation for duty     |           |    |   |
| Appropriate dress or grooming                        |           |    |   |
| Other (please describe)                              |           |    |   |

**Global assessment: compared to other students with a similar level of experience, this student's performance today was:**

|           |            |         |                       |
|-----------|------------|---------|-----------------------|
| Lower 1/3 | Middle 1/3 | Top 1/3 | Exceptional (top 10%) |
|-----------|------------|---------|-----------------------|

**Please comment on this student's performance today:**

## THE BOTTOM LINE

- ✓ Performing well on your EM rotation requires knowing the differential diagnoses for common chief complaints, being able to synthesize and succinctly present patients to your attending or supervising resident (including your plan), “owning” and re-evaluating your patients, and being a great team player and communicator.
- ✓ Ask for feedback! Familiarize yourself with the tools that will be used in your evaluation so you can focus on demonstrating behaviors that will give you a competitive eSLOE.
- ✓ Make use of resources, such as the Patient Presentations in Emergency Medicine instructional video, to learn how to effectively and efficiently tell your patient's story.
- ✓ **Do not under any circumstances lie about the patient history you take or an exam finding.** Your supervisors know you're learning, and they don't expect perfection. They do expect honesty — and it will take a long time, if ever, to earn back trust if you lie.

# Building Your ResidencyCAS Application

By now, you have started to consider the different types of EM residency programs available (Chapter 4), you have completed or scheduled your EM clerkships and USMLE/COMLEX exams (Chapters 3 and 5), and it's time to understand how you go about applying to residency programs. The application has several components, and each will impact your competitiveness (Chapter 8). Be sure to connect with your advisor as you build your application to discuss your unique concerns and help guide your decision-making. As a reminder, students at schools without an EM residency or EM advising can email [distanceadvising@cordjobboard.com](mailto:distanceadvising@cordjobboard.com) for help finding an advisor.

## ResidencyCAS

ResidencyCAS is a centralized application service offered by Liaison International.<sup>1</sup> This platform has been in use in health care and other settings for decades, and was first used in the world of graduate medical education (GME) by OB/GYN programs in the 2024-2025 residency application cycle. Emergency medicine programs will be utilizing ResidencyCAS for the 2025-2026 application cycle.<sup>2</sup> Your ResidencyCAS application will provide a great deal of information about you, and residency leaders will use it to consider you for an interview invitation, to help prompt interview discussion, and to determine your position on their rank list.

At the time of publication of this guide, EMRA and CORD anticipate that all EM residency programs will transition to ResidencyCAS for the 2025-2026 season. You can refer to the CORD Emergency Medicine Collaboration with ResidencyCAS page for more updates.

## How Do I Create a ResidencyCAS Account?

Registering for ResidencyCAS requires an individual access link that will be provided to you by your medical school's Dean's office.<sup>3</sup>

**IMG Candidates:** Visit ECFMG to fill out a "Residency Application Support Form" and pay an associated fee. Once the form is received and processed,

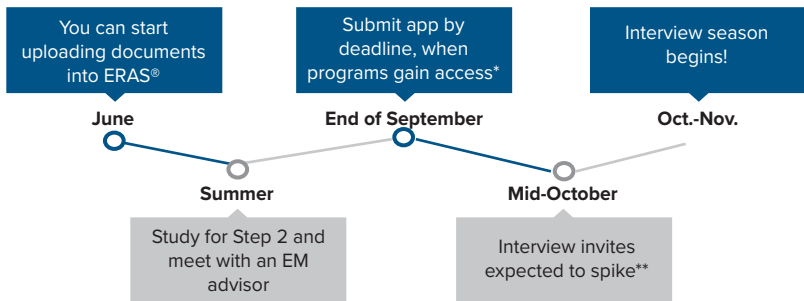
a member of ECFMG's residency application support team will contact you with specific information and instructions for document submission. Your instructions might vary depending on several factors, such as whether you are participating in multiple residency application services. Further access information will be provided by ECFMG. Graduates of Canadian medical schools should visit CaRMS.ca for information on how to register for ResidencyCAS. To receive access to the ResidencyCAS application portal, send an email to [eras@carms.ca](mailto:eras@carms.ca) with the following information: First name, last name, medical school, and your email. The email you provide must match the email you will use when completing your residency application.

**Military Match:** The military uses a separate application system through MODS. However, you must also apply through ResidencyCAS to be considered for civilian programs in case of deferment.

## Know The Timeline

Keep key dates in mind when approaching the application process, and mark them on your calendar. The first is the date when ResidencyCAS opens and you can begin editing your application and uploading documents, typically in early June to allow you ample time to work through the steps of your application, request letters, and determine which programs you will be applying to/signaling before the start of the season.

### FIGURE 71. Important Dates



\* Dates may change annually, so check the ResidencyCAS website for definitive dates.

\*\* CORD sets a voluntary Common Interview Release Date for EM programs, which changes annually.

Applications will be due in late September, and it is important to have your application submitted by this deadline. Exact dates may vary between cycles – double check the ResidencyCAS website for your year, and mark these dates on your calendar!

Residency programs are granted access to applications and supporting documents on a set date after the submission deadline, typically in late September/early October.

## Stick to the Timeline!

You must submit your application before residency programs are granted access. In a prior survey of PDs, only 15% of respondents stated that it was “highly likely” that an application would be reviewed if it were completed after applications become available to residency programs.<sup>4</sup>

Regardless of when you apply, once you certify and submit your application, you will not be able to make changes other than editing your contact information, adding new entries to certain areas of the “Supporting Information” and “Program Materials” sections, adding additional programs, or uploading additional letters of recommendation.

**Military Match:** The deadline for initial application to military programs through MODS is the second week of September, and supporting documents are typically due mid-October. Rank lists are usually submitted around this time as well. Keep these military-specific deadlines in mind, as you must complete both MODS and ResidencyCAS simultaneously.

**Latecomers:** Don't wait for rotations or letters to submit your application. **Submit it on time, and update it with additional documents as they become available.** A program will wait for a letter, but if your application isn't in by the deadline, they are unlikely to seriously consider you.<sup>4</sup>

## The Components of the ResidencyCAS Application

- **Personal information**
  - Biographic information
  - Contact information
  - Geographic connections
  - Race & ethnicity
  - Work authorization
  - Other information
    - Language proficiency
    - Pell Grant recipient
    - First-generation college student
    - Military status
    - Felonies/Misdemeanors
    - Health Care License infraction
  - Match information
    - NRMP participation

- Couples Match
- **Academic history**
  - College(s) attended
  - Medical school attended
  - Medical school release
  - USMLE and COMLEX scores
  - Interruptions in medical school education
  - Residencies & fellowships
- **Supporting information**
  - Experiences & activities
  - Employment (non-medical)
  - Publications/presentations
  - Honor societies/honors & awards
  - Hobbies & interests
  - Optional reflective statement
  - Personal statement
  - Medical school transcript
  - Medical Student Performance Evaluation (MSPE or “Dean’s Letter”)
  - Photo
- **Program Materials**
  - Evaluations/Letter(s) of Recommendation
  - Program signals
- **Residency Program application list**

## Personal Information

This section is where you enter your basic demographic, biographic, and background information, including military service obligations, couples matching information, language proficiency, prior misdemeanors/felonies, and health care license infraction information. Applicants also have the opportunity to share attributes that residency programs may identify as impactful, such as identifying themselves as a Pell Grant recipient or as a first-generation college student.

### Geographic Connections

New to the 2025-2026 residency application cycle is the addition of “Geographic Connections.” This section allows you to indicate up to three locations where you have a particularly strong connection. It can be (but doesn’t have to be) where you grew up or lived for a period of time and can be different from your current address as collected in the “Contact Information” section.

**Note:** It can also be somewhere you have not lived but where you may have a personal tie, such as where your significant other’s family or other social support



system may be located. Applicants will also be able to provide an optional, very brief explanation of why they have selected each geographic connection.

### **NRMP ID**

Registering for the NRMP Match is a separate process from creating and submitting your ResidencyCAS application. You must go to the NRMP website ([www.nrmp.org](http://www.nrmp.org)) to register and pay the one-time fee for the NRMP Match. Note that NRMP Match ID registration historically does not open until mid-September, and late registration for an additional fee begins after late January. You do NOT need this ID number to submit and certify your ResidencyCAS application. This ID will automatically link to your ResidencyCAS account and be available to the programs where you apply. No manual entry is required.

**Couples Match:** Discuss with your advisors and partner if you will disclose your couples match status on ResidencyCAS. You are not required to disclose, and there are pros and cons to disclosure. In a survey of EM PDs, most responded that they contact the PD from the corresponding residency program at their institution when considering a member of a couple.<sup>5</sup> Disclosing couples match status allows program directors from each specialty to lobby for their applicant's partner. Conversely, if a partner is applying to a specialty that is not offered at the same institution, some PDs may think the interview might be low-yield. When it comes to EM-EM couples, many programs may make extra efforts to interview both members of a couple if the status is disclosed, but a handful of programs may want to avoid EM-EM couples. In general, the attitude within the EM community is that the benefits probably outweigh the risks for most couples.

**At-Risk Candidates:** Applicants are required to disclose a history of felony or misdemeanor convictions. An applicant with this history is best served by accepting responsibility, taking ownership of what happened, and demonstrating conscious changes for the better. If an applicant selects "yes" in this section, a text box will pop up to provide an opportunity to offer clarifying information and context.

## **Academic History**

In this section, you will enter information about the college(s) and medical school(s) you attend(ed) and any residencies or fellowships in which you may have already participated.

You will also have the opportunity to disclose interruptions in your medical school education with the requirement to select a reason for the gap (academic, financial, medical, research, personal, other) and the option to provide additional details for the interruption (up to 250 characters).

You can choose whether to release your application and interview offer information to your medical school. We recommend that you choose to do so, as this information allows your deans and advisors to view your progress through application season, including any interview offers received. This transparency with your medical school can help them guide you throughout the residency application process.

### **USMLE or COMLEX Transcripts**

Within the ResidencyCAS platform, you will be directed on how to authorize and release your Step/Level scores. For the 2025-2026 application cycle, to upload USMLE scores, you will be directed to the Federation of State Medical Boards (FSMB) site to pay a one-time transcript fee. For COMLEX, you will enter your NBOME ID and pay your transcript fee directly within ResidencyCAS. You can track the status of your transcript request in the USMLE and COMLEX scores section of ResidencyCAS.

***Note:** If your Step 2 score is not available at the time of your initial application, you must go back into this section of ResidencyCAS when the score is available and select “Re-Request.”*

Guidance about when to take USMLE Step 2 CK can be found in [Chapter 3: Third Year and Planning for Fourth](#). Information about how your USMLE/COMLEX scores should influence your application strategy can be found in [Chapter 8: Apply Smarter, Not Harder: Understand Your Competitiveness](#).

**Osteopathic Students:** You can upload COMLEX transcripts, USMLE transcripts, or both. If uploading COMLEX transcripts, you must authorize their release and pay a transcript fee, similar to the process for uploading USMLE scores. As mentioned in [Chapter 2: The Preclinical Years](#), acceptance of COMLEX Level 1 may change with USMLE Step 1 and COMLEX Level 1 now being pass/fail examinations, but that is still unknown. Available data indicate that if you are an osteopathic medical student, taking at least USMLE Step 2 in addition to COMLEX Level 2 will open more opportunities for residency interviews.<sup>6</sup> Refer to EMRA Match for programs that will accept COMLEX scores alone to help inform your application decisions.<sup>7</sup>

**IMG Students:** USMLE transcripts for IMGs are released by ECFMG rather than NBME.

## **Supporting Information**

### **Experiences and Activities**

You will be **limited to 12 total experiences** and will have the opportunity to choose your top three most meaningful/impactful experiences. For each experience, you will be asked to provide a brief description that explains your

“key responsibilities” (600 characters), as well as information about the amount of time dedicated to the experience (Start/End Date and hours per week) and if the experience is ongoing.

For each of these experiences, you will assign a:

- **Type:** Work, Research, Volunteer/Service, Advocacy, Military Service, Teaching/Mentoring, Extracurricular Activity or Club
- **Domain:** Athletics, Clinical Informatics, Communication and Population Health, Customer Service, Direct Patient Care, Diversity and Equity, Global Health, Healthcare Administration, Leadership, Health Policy, Medical Education, Music/Art, Patient Safety, Public Health, Quality Improvement, Rural Health, Social Justice/Advocacy, Technology, Wellbeing, Other
- **Competency:** Accountability/Conscientiousness, Conflict Resolution, Critical Thinking, Cultural Humility, Ethical Principles, Innovation, Interpersonal and Communication Skills, Leadership, Reflective Practice/Personal Growth, Resilience, Situational Awareness, Systems Thinking, Teamwork, Time Management, Other

The purpose of labeling the experience types, domains, and competencies is to allow applicants to delineate with more detail, but in more standardized terms, how they have spent their time. These fields will factor into the ResidencyCAS holistic scoring tool used by programs to help surface applicants whose interests align well with the program's focus or mission. Some experiences may cross multiple “Types,” “Domains,” or “Competencies.” Applicants should make selections they feel are most reflective of the experience. There is an option to select “Other” for experiences that applicants feel do not easily fit within any one of the provided competencies.

### Holistic Scoring Tool

The holistic scoring tool is a calculator that assigns a score to each applicant applying to a particular program based on weights set by that program. The score is calculated using discrete data from that applicant's application. It is important to understand that the holistic scoring tool is not intended as a filter. It is designed to allow programs to surface applicants who align well with their mission and recruitment goals, yet they may have otherwise been overlooked. There is no such thing as a perfect score, and an applicant's score at one program will be different from that same applicant's score at another program because each program will adjust its holistic score for attributes it seeks to identify. The holistic score is only one component of application review and does not take the place of a thorough review of your application that programs will continue to perform. Because the holistic score is a relative value and unique to each program, an individual applicant does not receive their score.

If you are dual applying to EM plus another specialty that also uses ResidencyCAS, you might need to carefully consider how best to allocate your experiences, since the same 12 will be seen by all programs across all specialties to which you apply. While you can list any experience you choose, a general rule of thumb is to select experiences that demonstrate a reasonable amount of time and/or effort committed to that experience over “one-off” events. For EM, we cannot overemphasize how essential it is to be authentic to who you are and what is important to you (not what you think programs want to hear)!

### ***Employment (Non-Medical)***

New in the 2025-2026 residency application cycle, you will have the opportunity to separately include up to three non-medical employments in your application, which will not count toward your other 12 experiences. While not necessarily intuitive, non-medical work experience can communicate valuable information about an applicant, including experience with customer service and task-switching skills, among others. Non-medical employment may explain gaps in your education or less robust extra-curricular experiences, can demonstrate commitment to an activity often of significant time and/or effort in addition to your education, and may also help programs understand your life experience and path to medicine.

### ***Publications/Presentations***

You may include up to 30 publications and 30 presentations in this section, but most applicants to EM won't have nearly that many.

### ***Honor Societies/Honors and Awards***

You will have the opportunity to signify participation in Gold Humanism Honor Society, Alpha Omega Alpha, and Sigma Sigma Phi in the “Honor Societies” section. You may list an unlimited number of honors or awards as well. We recommend refraining from listing clerkship honors, as these are viewable in other areas of your application.

### ***Hobbies and Interests***

You may list up to three hobbies and interests, along with a description.

**Taken in sum**, the “Supporting Information” section allows you to describe accomplishments outside of the classroom/clerkships and highlight personal qualities not captured elsewhere in the application. This section is often thought of as the “X-factor” of your application and helps reviewers gauge how well you resonate with the program's values. It can be helpful to think of this section as evidence to support the narrative you will reference in your personal statement and interviews.

In this section, there is a real opportunity to stand out from other applicants. Simply listing your experiences does you a disservice – the application is much

stronger if you include brief details of each activity to highlight your role. Describe what you learned from each experience, what new skill(s) you acquired, and/or how it made you a better person. Focus on writing more about the experiences that were the most significant to your personal and professional development. Take advantage of the “Hobbies and Interests” section; programs like to have a window into who you are outside of medicine, and it’s frequently a great springboard for conversations during program interviews. You should be prepared to talk about anything you include in this section during an interview day.

**A common pitfall in this section** of the application is exaggerating the amount of time you committed to an activity or the scope of your role and responsibilities. Be truthful – always.

**Latecomers:** Include activities and accomplishments in other fields in your experiences on your CV if they are substantial. There are many paths towards EM, and leadership, work, and research in other specialty areas may still be relevant. Emergency medicine as a specialty requires a broad set of skills and interests.

### ***Optional Reflective Statement***

This optional statement provides an opportunity for applicants to describe unique life experiences they have encountered or overcome along their journey to residency that are not captured elsewhere in the application. It is designed to offer more perspective on you as a person; however, it is different from your personal statement, which should focus on the experiences and background that have drawn you to and prepared you for EM. What you choose to include here might have nothing to do with your decision to pursue EM but can give reviewers more of a full picture of who you are and what it has taken for you to get to this place in your training. This essay opportunity is not meant to discuss common hurdles overcome by many applicants, such as academic struggles. Programs expect that most applicants will leave this prompt blank, either because it does not apply to them or because they may not feel comfortable sharing such personal information. Remember that if you do choose to answer, it is “fair game” for your interviewer to ask about this topic.

Some thematic examples of the types of experiences previous applicants have included:

- **Family Background:** Being an immigrant and the obstacles this status may have presented, first generation college student
- **Financial Background:** Being from a low-income family or other financial struggles that may have impeded your journey to medicine

- **Community Setting:** Growing up in an area with high poverty levels, facing food scarcity, or housing insecurity
- **Other Life Circumstances:** Loss of a family member, health issues affecting you or a close family member, being the main caretaker for a sick loved one

### ***Personal Statement***

Personal statements can cause a high level of anxiety. How do you write a personal statement that effectively introduces you and captures your excitement about EM? What is the role of the personal statement? How does it differ from other parts of your application? How much will it matter?

A survey of EM residency directors showed the most influential components of residency applications are SLOEs, residency interviews, EM evaluations/grades, and clinical clerkship grades. The personal statement ranked below all of these components in importance.<sup>8</sup> This is good news and bad news. A poorly written or otherwise bad personal statement likely has more potential to harm than a good personal statement has the potential to help. It is unlikely a great personal statement will make up for an otherwise poor application, but sometimes a great personal statement can tip the scales in your favor.

**So, how do you write a good statement?** Applicants typically begin by describing by what path they came to discover EM as the field for them. Then show (rather than tell) programs that you have the qualities to be a great resident by using examples from your experiences and achievements. Writing about how much you enjoy EM does not distinguish you from any other applicant; focus instead on what makes you unique. Describe the challenges you've faced to demonstrate your ability to persevere. Highlight how your previous experiences show your passions, values, and goals, and how you plan to channel these into your career. You don't need to go into every past experience; choose key examples that highlight who you are and amplify your narrative. Programs want to know if you will be a good fit with their program, so close by discussing what you are looking for in a residency program and what you want to gain from the next 3-4 years of your training.

Other essential facts that apply to all writing apply here, too.<sup>9</sup> Edit your statement, put it away for a few days, and then edit it again with fresh eyes. Have advisors and friends read it as well to offer a fresh perspective. Make sure you correct all grammar and spelling mistakes. Although it is stressful, try to have some fun with the process. It is, by definition, the most personal part of the application. Allow yourself to reflect on what makes you you, and let that shine through.

Your personal statement is limited to 4,000 characters. As of the 2025-2026 residency application cycle, you can only create one personal statement for all

programs to which you are applying in EM. You cannot personalize statements for individual programs. You will have the opportunity to signify interest in a particular program through “Program Signals” and a particular geographic location through “Geographic Connections.”

**At-Risk Candidates:** Applicants with a facet of their application that is likely to be considered a red flag, such as a USMLE/COMLEX or course failure, a felony or misdemeanor conviction, a gap in their CV, etc., should use at least part of the personal statement to address these issues.<sup>10</sup> The optional reflective statement may also be an appropriate place to address these topics. These components are likely the initial places a reviewer will look for an explanation. If they do not find one, there is little incentive for them to go any further in considering you for an interview. Take ownership of your past and do not make excuses. Articulate how you have emerged from your challenges better equipped for a career in EM. Most importantly, have your advisor read your statement and give you feedback.

**Latecomers:** The personal statement may be a good place to explain how you came to EM as a specialty, but keep it concise. Be sure your statement also shares experiences that convey the bigger picture of who you are and what you have to offer.

**Dual Applying:** While you cannot create different personal statements for different programs, you can create and assign different personal statements to different specialties, which is important for students applying to both EM and EM-combined programs (which are considered separate specialties in ResidencyCAS) or a different specialty that also uses ResidencyCAS.

### ***Medical Student Performance Evaluation (MSPE) – AKA The Dean’s Letter***

The MSPE is not a letter of recommendation but rather an administrative summary of your performance throughout medical school, up to and including your clinical clerkships. It emphasizes strong attributes demonstrated throughout your medical education, highlights your accomplishments, and addresses any red flags or difficulties, including course remediation/failure or identifying any gaps in your medical school education. It also provides a summary of the narrative feedback from your clinical clerkships.

The MSPE traditionally includes your rank compared to your classmates, and this can help you gauge your competitiveness as an applicant; however, not all medical schools have a class ranking system. In this case, your school will indicate this in the MSPE. Check with your dean ahead of time to understand your institution’s process so you can better understand your competitiveness.

**At-Risk Candidates:** Be familiar with your MSPE so you can address any red flags, such as course failures, unexplained extensions or gaps, or professionalism issues in your personal statement and during your interviews. Take ownership of the issues, reflect upon what you have learned, and be ready to explain the changes you have made to ensure that the past will not repeat itself during residency. It can be beneficial to work with your letter writers to help address these potential red flags as well.

**Latecomers:** If you change specialties, be sure to update your dean as soon as possible. They may choose to emphasize different aspects of your strengths or accomplishments as they relate to EM in the MSPE.

### **Medical School Transcript**

Your transcript is a list of your preclinical and clerkship grades. Your MSPE will provide more detailed information about your clerkship performance. While basic sciences grades have been ranked lower in terms of importance to residency programs, performance in required clinical clerkships is cited as being highly valued.<sup>8</sup>

### **Photo**

While your photo does not need to be from a professional photographer, you do need to appear professional. Appropriate attire and posing/positioning matter. No selfies! While some programs may choose to blind your photo as part of their initial review, they will likely use your photo once they have met you at an interview, so they can best remember and keep track of each applicant.

## **Program Materials**

### **Letters of Recommendation**

ResidencyCAS allows you to submit a maximum of four Letters of Recommendation (LoRs) to each program, but it is not necessary to upload four. It is variable how many total letters a program will want before they consider an application to be “complete enough” to offer an interview, though some programs require three total letters, making this a good target number. In [Chapter 5: Applying for Away Rotations](#), it was discussed that the eSLOE obtained at the end of each EM clerkship is the single most crucial component of your application.<sup>4,6,8</sup> As a reminder, eSLOEs are obtained by completing EM clerkships at institutions that have an EM residency program. Only a total of two EM rotations are typically recommended or required.<sup>11</sup>

**While it can be to your advantage to have both eSLOEs uploaded by the time ResidencyCAS applications open for programs to review, it's not a deal-breaker.** Many programs will still consider you with only one eSLOE at the time of their application review and interview offer, though the majority want to see a second eSLOE by the time of interview and ranking. Refer to EMRA Match and



program websites for eSLOE number requirements and preferences. A third eSLOE is rarely suggested but may be beneficial if you have academic red flags or had a challenging EM rotation.<sup>12</sup>

In addition to the two eSLOEs recommended from your clerkship experiences, you can add LoRs from other faculty members with whom you have worked closely, either in SLOE format or narrative format. You may request a SLOE from an EM faculty member who works at a hospital affiliated with an EM residency program (eSLOE for academic EM faculty), one at a hospital not affiliated with an EM residency program (SLOE for non-academic faculty), or a faculty member you worked with during an EM subspecialty rotation, such as ultrasound, EMS, pediatric EM, or toxicology (SLOE from an EM subspecialty rotation). O-SLOEs (Off-Service Standardized Letter of Evaluation) can be used for non-EM clinical experiences, such as surgery or intensive care rotations.<sup>13</sup>

For letters reflecting a non-EM clinical experience, you should preferentially request that letter in O-SLOE format, as this carries slightly more weight than a standard narrative LoR. For letters reflecting non-clinical experiences, such as letters from research mentors, medical school advisors, deans, or individuals with whom you've worked closely on important projects or initiatives, a traditional narrative format should be used – just realize this will likely carry less weight than a clinical LoR.

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*Academic EM faculty group eSLOEs carry more credibility and weight than any other type of SLOEs.*

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Within ResidencyCAS, you will have the ability to request an EM SLOE (which you should select for eSLOEs, SLOEs for non-academic faculty, EM subspecialty SLOEs, and O-SLOEs) or an EM Narrative Letter of Recommendation. For both options, you must enter the names and email addresses of your letter writers, whether or not you waive the right to view each LoR, and indicate whether or not you give permission for schools, programs, or sites to contact the evaluator. In general, applicants waive the right to review their LoRs, allowing letter writers to provide a candid assessment. Once this request has been submitted, your letter writer will receive an email that directs them to either the CORD eSLOE website (if you requested a SLOE) or Liaison Letters (if you requested a narrative LoR), which is the ResidencyCAS evaluator portal. You will be able to monitor the status of your LoRs, which will be listed as “requested,” “accepted,” or “complete” in your applicant portal.

**It is important to know that after four LoRs are assigned to a program and completed, you can no longer remove/add LoRs.** Therefore, if you plan to perform a late EM rotation (September or later) but are counting on this rotation for an eSLOE, it is important to leave a LoR spot open for this eSLOE at the time of your initial application submission. **Additional letters can be added as they become available, but do not delay submitting your applications while waiting for eSLOEs to be uploaded.** While each student rotation is different, it is reasonable to expect that an eSLOE may take a few weeks after your rotation for the program to complete. Programs will often make extra efforts to decrease the turnaround time for rotations occurring in September and beyond.

You can have more LoRs uploaded to ResidencyCAS than you can assign to each program, and can choose to assign different letters to different programs. However, it is important to note that each program should preferentially receive your academic EM faculty group eSLOEs. Academic EM faculty group eSLOEs carry more credibility and weight than any other type of SLOEs.<sup>14</sup>

**Latecomers:** While studies show that letters from a physician in a specialty other than EM, even in O-SLOE format, carry less value than an EM eSLOE, these letters are still valuable, especially as you may have a mentor or advisor from a different specialty who has worked closely with you.<sup>8</sup> You can consider including a non-EM LoR if you had a strong relationship with the writer and feel they can speak to attributes or qualities less described in your other letters. Be sure to leave room in ResidencyCAS to upload two eSLOEs, even if they will be uploaded after you submit your application.

**Reapplicants to EM:** If applying to EM after beginning a residency in another specialty, it is critical to include a supportive LoR from your current program director, describing your performance as a resident.

## **Program Signals**

Program signals are a method by which applicants can indicate a strong interest in a program at the beginning of the application season, with the goal of increasing the likelihood of receiving an invitation to interview. In the 2025-2026 cycle for EM, applicants will have the opportunity to **submit five program signals, all of equal weight, and are advised NOT to signal home or away programs where they completed a visiting rotation**, as these are often high-yield in terms of interview offers. You will assign these signals as part of your ResidencyCAS application.

Residency programs will be able to view your signal at the time of initial file review, once ResidencyCAS opens to programs. Programs have utilized the signal in a variety of ways: part of a holistic approach to application review, as a tie-breaker between similarly-matched signaling versus non-signaling

candidates, as a screening tool, as a tool to prioritize wait list order, and/or as a topic for discussion during interviews (an applicant may be asked to expand on their reasoning behind the signal; however, they should not be asked where else they may/may not have signaled, why they did not signal, or if they participated in signaling). While signals are not intended to be used as part of the rank list discussion and preparation, it is important to note that 11% of surveyed EM PDs reported using program signaling for this purpose in the 2022-2023 application cycle.<sup>15</sup>

You might imagine that a program that only receives a handful of signals might incorporate this information differently into its review process than a program that receives hundreds of signals. A survey of EM PDs in the 2022-2023 application cycle revealed that as the proportion of signaled applications decreased, the likelihood of a program offering interviews to a signaling applicant increased (and vice versa).<sup>15</sup>

As one would imagine, as the number of signals received by a program

increases, the relative signal value at that program will decrease. If an applicant doesn't have the strongest application, and they utilize all their signals at highly competitive or "reach" programs, which are likely to receive a large number of signals, then the emphasis behind that applicant's signal may be lost and therefore not best utilized for the highest gain. Depending on an applicant's competitiveness, there may be utility in sending a signal to one or more "safety" or less competitive programs (again, assuming they actually want to be at that program), but there is no data to support this particular recommendation. The most important factor remains that the applicant should signal programs where they are truly interested in training and think they would be a good fit.

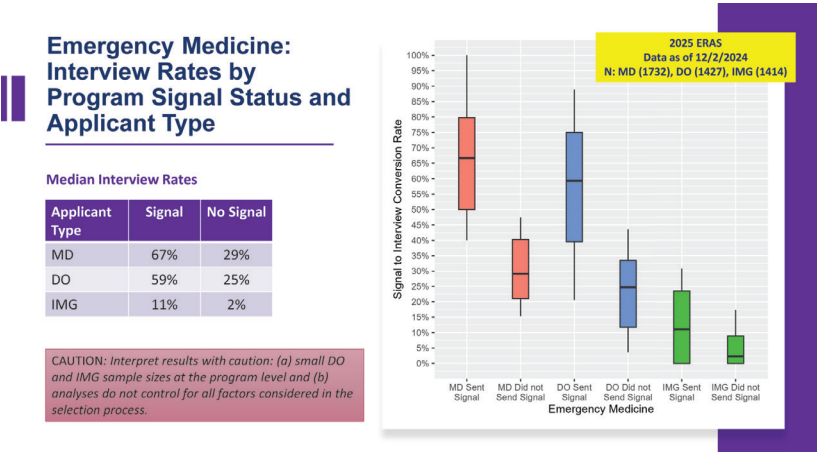
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*The most important factor remains that the applicant should signal programs where they are truly interested in training and think they would be a good fit.*

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Emergency medicine data from recent Match cycles shows that the likelihood of receiving an interview was higher at a signaled program than at a non-signaled program.<sup>16</sup> While sending a signal does not grant you an automatic interview, it is important to note that the opposite is also true – programs are still offering interviews to candidates who did not signal them.

**Figure.** Emergency Medicine Applicant Interview Rates by Program Signal Status & Applicant Type, 2024-2025 cycle<sup>16</sup> *(used with permission)*



Because signals will be assigned in concert with ResidencyCAS submission, it is strongly recommended that applicants spend some time researching programs and reflecting on what their priorities are in a prospective training program early, as they are putting together their initial application. There will be more opportunities to learn and reflect in depth on programs during the interview and ranking phase of the process, but having an understanding of some basic program information and the characteristics of applicants that have been accepted in the past is useful as applicants select the programs they plan to signal. There will not be a post-interview round of signals.

**We strongly suggest that applicants work with their medical school and EM advisors and reflect honestly on the strength of their application.** This, in turn, will help inform an applicant on the best allocation of their signals. We also suggest that applicants do their research and look closely at program information available to them via EMRA Match, Texas Star, the AAMC Residency Explorer tool, and program websites, etc., to compare their application information with information of current/past residents. ResidencyCAS does allow programs to present some information as well as links to their website; however, it is not designed to replace the other tools above, which may be more useful in creating the list of programs to which you will apply.

**Applicants with Limited Advising:** Because the signaling process is still relatively new for EM, few emergency physicians outside of academics are aware of these changes to the residency application process, so they lack the necessary details to advise on signaling. Residency programs, on the other hand, are acutely aware of these changes as they affect them, too. Therefore, if your medical school is not affiliated with an EM residency program but you have contact with an advisor at an EM residency program outside of your institution, please reach out to them!

Note: If you are a student at a U.S. medical school and do not have access to any advisors at an EM residency program, you can email [distanceadvising@cordjobboard.com](mailto:distanceadvising@cordjobboard.com) to be connected with an advisor from an EM residency program.

## THE BOTTOM LINE

- ✓ Be honest on your application; do not inflate your accomplishments or involvement in anything. Program directors look for congruence. They want to make sure the person they interact with on the interview day is consistent with the person they see on paper..
- ✓ Anything on your application is fair game to be discussed further in an interview. If it is on your application, be prepared to talk about it!
- ✓ Spelling and grammar errors can be a kiss of death. Spend time making your application clear, crisp, and error-free. From the ResidencyCAS site, you can print your application to review for errors. Have friends, family, and mentors read over your application before you submit it.
- ✓ Stick to the timeline. It is okay to not have two eSLOEs uploaded by the date ResidencyCAS opens to programs, but you must have your application (including other LoRs) submitted by this date. **Do not submit late!**



# Apply Smarter, Not Harder

## *Understand Your Competitiveness*

### So how competitive am I?

Every applicant has their strengths and weaknesses, and the vast majority of applicants fall into a competitive category. While we can never replace an EM-specific advisor who is familiar with your application's strengths and weaknesses, we will use survey and analytical data from the NRMP and residency program leadership to help you better assess your level of competitiveness. We would encourage you to perform your own assessment and share it with an EM advisor. Don't have an EM advisor? Feel free to sign up for one! Just request an advisor by sending your contact information to [distanceadvising@cordjobboard.com](mailto:distanceadvising@cordjobboard.com).

### What is (and isn't) competitiveness in the EM Match?

Competitiveness is your ability to successfully match into an EM residency, which is related to the likelihood of obtaining enough interviews to match. When we discuss competitiveness, we usually do so in reference to a successful match into an EM residency program, which is not necessarily the same as matching into the residency program you most prefer. Most of the data we use helps us to understand how populations of students successfully match into any EM residency program. It is important to know **competitiveness is not a contest between you and other applicants**; rather it is a propensity for you to match successfully in EM overall.

Competitiveness is multifactorial and influenced by intangible and tangible factors. Intangible factors might include common interests shared between you and the program or a sense of feeling that you will fit in a program. We often lack sufficient data to quantify a "fit" for a program based on candidate preferences, but you will determine program fit as you evaluate and interview with programs. Tangible factors may include grades, board scores, class rank, letters of recommendation, research publications, and other such measures and can be quantified based on nationally available data. However, please remember that **numbers don't tell your whole story** or a complete story of a

program. Assessing your competitiveness is an important milestone on your journey to residency. In addition to the elements described above, your ultimate success in the Match is greatly affected by your application strategy and your sense of fit within particular programs, both of which can be best assessed by you and your EM-specific advisor.

### **The elephant in the room: How does the number of applicants to EM overall influence my competitiveness?**

In the 2021-2022 and 2022-2023 NRMP Match cycles, we saw declining numbers of EM applicants, after having seen growth among applications for many years. We have also seen the number of available EM residency positions continue to increase. Even if math isn't your strong suit, it's easy to recognize that fewer applicants and more available positions likely means less overall competition. Even as these variables change, we can still assume that PDs are looking for a certain caliber of applicants. We can also still assume that applicants will develop at least one, but probably a few, preferred programs. The numbers and advice shared here are derived from data and evidence, including post-Match data from the 2021-2022 NRMP Match. If the data changes, advising patterns will also change. The advice presented here is based on data as current as possible, and though we may see shifting trends in the numbers of applicants and programs, the general advice given here should largely be appropriate and applicable for the next few years. In this edition, competitiveness is described with ranges, which will likely still be appropriate for the next few years as well.

### **What is the difference between being nationally, regionally, or locally competitive?**

As mentioned, local or specific program competitiveness is difficult or even impossible to predict. Your competitiveness within a specific locality or program may center on personal relationships, familiarity with a program, or nuanced qualifications, in addition to more standardized qualifications such as national board scores and letters of recommendation. Moreover, individual programs will emphasize different application components (eg, an eSLOE from a neighboring or known program may have more weight than your board scores) that might change how competitive you are within that location. Ask your academic advisor for insight into particular programs. It's also important to ask PDs what is important in their program. Program websites and the EMRA Match database also offer insights into each program's emphasis.

Regional competitiveness might be influenced by relationships but may also be influenced by a rotation or eSLOE generated from a rotation within that same region. Program leaders place substantial influence upon letters and evaluators



with which they are familiar — in a 2014 PD survey, 97% of respondents agreed that “knowing the person who wrote the SLOR [now known as the eSLOE] increases its value to my decision-making.”<sup>1</sup> While some programs within a region share some of the same preferences or priorities when selecting candidates, not all do, thus making regional competitiveness also challenging to predict.<sup>2</sup>

National competitiveness is a broader concept but easier to quantify in terms of common residency application components, including grades, board scores, class rank, and letters of recommendation. National data on competitiveness presented in this chapter represent data that historically have predicted a successful match into EM and the preferences and consensus opinion of those individuals who are involved in allocating interviews and generating rank lists at EM residency programs.

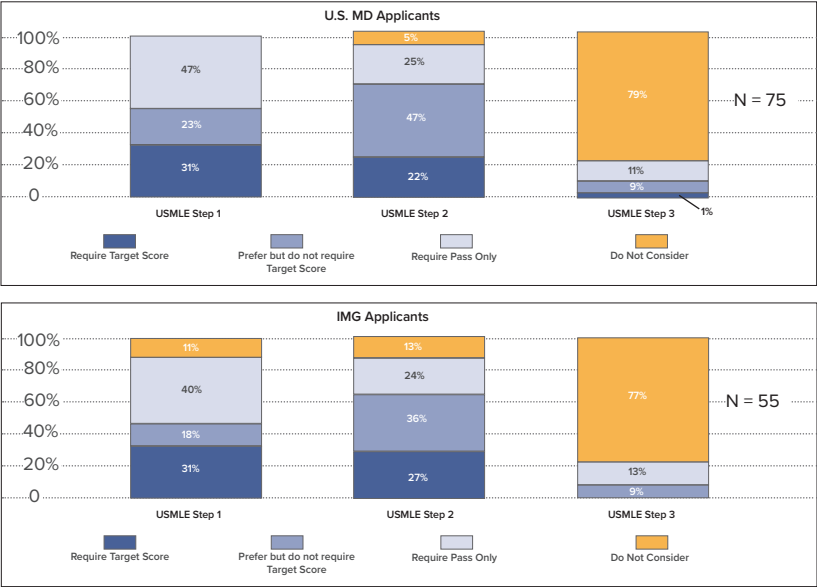
## **ERAS Applications, Filters, and Your Competitiveness**

Your ability to match closely correlates with the likelihood of obtaining enough interviews to match. Residency programs need to find ways to sort through the large number of applications they receive each year. One way they do this is by applying screening filters to help determine which files to review further for an interview offer. In a 2022 PD survey, approximately 30% of applications were rejected based on a standardized screen.<sup>3</sup>

The 2022 USMLE Step 1 and COMLEX Level 1 transition to a pass/fail examination coincides with an overall trend away from using Step 1/Level 1 as a measure for evaluating candidates for residency. Of note, before the transition to pass/fail, NRMP PD survey data indicated that 100% of PDs utilized USMLE Step 1 scores to determine whether to grant an interview, with nearly 50% just requiring a pass.<sup>3</sup> This suggests that going forward, many programs will use a failed Step 1/Level 1 score as a screening tool.

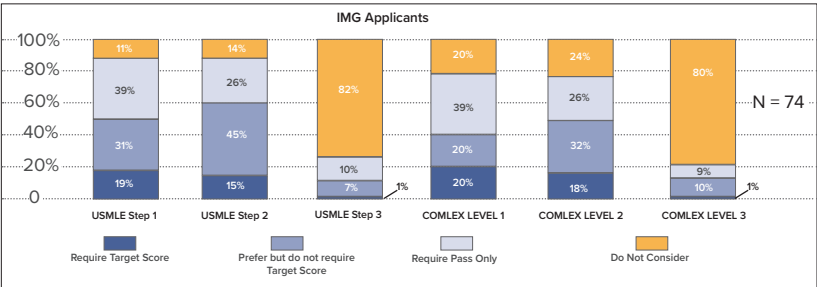
With this Step 1/Level 1 transition, USMLE Step 2 score targets have become more relevant. Nearly a quarter of PDs indicate a required target Step 2 score in selecting candidates for interviews, with an additional 47% citing a preferred score. An additional 26% required only a passing score. Thus, nearly all PDs in some way utilize a USMLE Step 2 score for evaluating candidates for interviews (Figures 8.1 and 8.2).<sup>3</sup> It is important to have a USMLE Step 2 score for entering the NRMP Match process and to increase your competitiveness in EM. Data in the 2021 NRMP PD Survey indicates a moderately high relative importance of USMLE Step 2 scores (3.8/5) compared to Step 1 scores (3.5/5); however, the USMLE Step 2 scores still rank lower in importance when compared to the MSPE, performance in the EM clerkship, and several other factors (Figures 8.3 and 8.4).<sup>4</sup>

**FIGURE 8.1.** Percentage of Programs Using USMLE to Select U.S. MD and IMG Applicants for Interview, 2022<sup>3</sup>



Seniors and graduates are considered together. Total number of respondents who indicated they “seldom” or “often” consider MD senior and/or graduate, or IMG applicants for interview. Percentages may not equal 100 because of rounding.

**FIGURE 8.2.** Percentages of Programs Using USMLE and/or COMLEX to Select U.S. DO Applicants for Interview, 2022<sup>3</sup>



DO seniors and graduates are considered together. Total number of respondents who indicated they “seldom” or “often” consider DO senior and/or graduate, or both types of applicants for interview. Percentages may not equal 100 because of rounding.

**IMG Candidates:** The most frequently used filter reported by programs is IMG (non-U.S. citizen) — reported by > 70% of programs. Target the majority of your applications towards programs that have historically accepted IMG applicants into their program, which can be searched on EMRA Match. The overall decrease in applications to EM may lead to an increase in receptiveness to IMG candidates, but it will take time to know if this is the case.

**Osteopathic Candidates:** The 2022 NRMP PD survey showed that 77% of ACGME PDs will often offer interviews to osteopathic students and 80% of them will rank osteopathic seniors.<sup>4</sup> In the 2022 NRMP Match, 89% of U.S. osteopathic seniors applying to EM (including applicants who dual applied with other specialties) matched, compared to 94% of their allopathic peers.<sup>5</sup> Use EMRA Match filters to see what programs have historically matched the most osteopathic applicants. By focusing your applications to these programs, you can maximize your opportunities to match.

**At-Risk Candidates:** If you have one or more failed attempts at USMLE Step 1 or COMLEX Level 1, use a search engine such as EMRA Match to identify programs that are less likely to filter out your application based on this single criterion. It is also vital that you meet with an EM-specific advisor to discuss a possible parallel application plan.

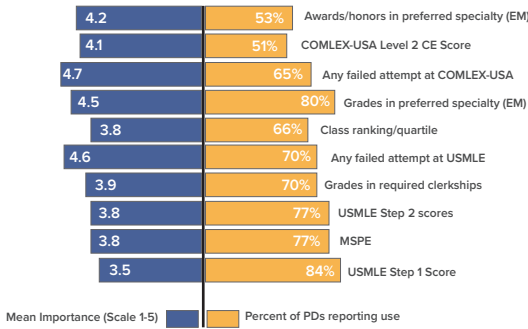
## Beyond Filtering

It is worth noting the AAMC, NRMP, and ERAS all support holistic application review and have developed tools for such review. More and more programs are adopting and developing holistic review processes to increase diversity, identify promising applicants, improve program alignment, and support an institutional mission. A holistic review of applications includes elements of both academic and personal characteristics, which are not so easily filtered.

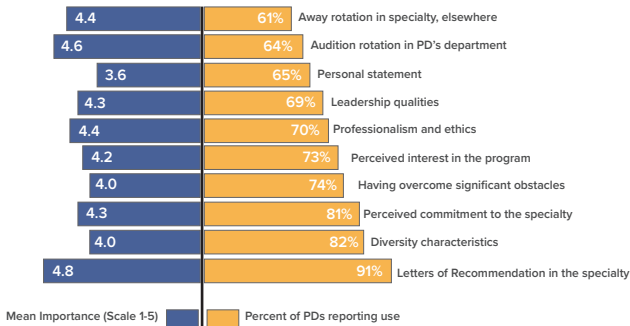
A selection of important academic and personal characteristics are shown in Figures 8.3 and 8.4, respectively. Notably, Letters of Recommendation in the Specialty (eSLOE in EM), Diversity Characteristics, and Commitment to the Specialty are among the most frequently cited elements. Concerning the relative importance of various personal characteristics, the eSLOE again stands out as very important — along with a few other factors, including performing an away rotation, completing an away rotation in a PD's department, professionalism and ethics, and the absence of any NRMP Match violations.<sup>6</sup>

Among programs citing holistic review approaches, the most common and most important elements of this review included an applicant's attributes, interests, interpersonal skills, ethics, professionalism, and personal experiences. Applicant geographic preferences were cited as a relatively important factor, but only 48% of the time.<sup>3</sup>

**FIGURE 8.3. Education and Academic Performance Characteristics Considered in Deciding Whom to Interview, By Frequency of Use and Mean Importance, 2021<sup>6</sup>**



**FIGURE 8.4. Personal Characteristics and Other Knowledge of Applicants Considered in Deciding Whom to Interview, By Frequency of Use and Mean Importance, 2021<sup>6</sup>**



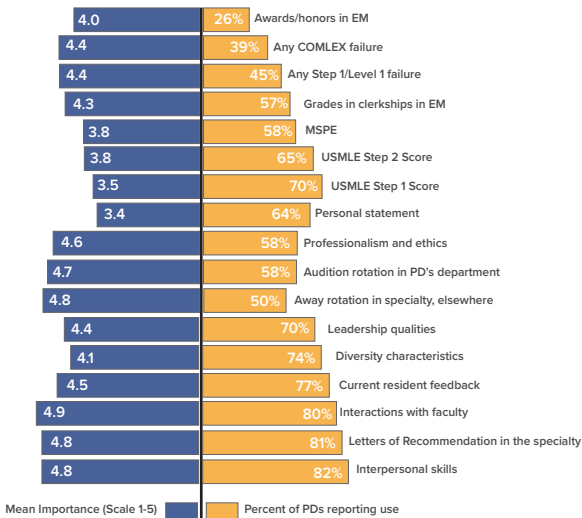
## Student Engagement with Programs

The COVID-19 pandemic brought many waves of change to the world and to EM residency applications, not the least of which has been the increased use of virtual opportunities for applicants to engage with residency programs and for programs to offer information to applicants. In 2022, a majority of programs relied upon and perceived a benefit from their websites, social media platforms, and virtual “open houses” as means to engage with applicants.<sup>3</sup> Though it is not clear if these behaviors increase competitiveness, some programs view this engagement as a proxy for interest in their program, which may help with matching at a particular program. Interested students are encouraged to use these resources to assess how their values, needs, and perceptions align with programs.

## Which factors are most influential in increasing candidate competitiveness?

There are differences between the factors that will help you garner an interview and the factors that affect your position on a residency program's rank list.<sup>5</sup> Important factors influencing an interview offer are presented in Figures 8.3 and 8.4, while Figure 8.5 highlights selected factors that influence rank position by PDs. The eSLOE and related factors (such as grades in your EM clerkships and EM rotation performances) are highly influential in both interview offer and ranking.<sup>3,6-8</sup> It is important to recognize some of the other factors that affect your chances of an interview offer may not be as influential on your final position on a program's rank list. After you get your foot in the door, interpersonal skills and interactions with individuals during your interview are the most influential components in ranking.<sup>3,6</sup>

**FIGURE 8.5.** Selected Personal and Academic Characteristics and Other Knowledge of Applicants Considered in Deciding Whom to **RANK**, By Frequency of Use and Mean Importance, 2021<sup>6</sup>



**Military Match:** Most military programs say the audition rotation is the **MOST** important factor in a candidate's application.

## **The eSLOE seems to hold a lot of influence, but I can't read it. How do I evaluate the competitiveness of my eSLOE?**

eSLOEs are routinely rated highly in terms of impact in selecting candidates for interviews.<sup>4,8,10</sup> However, candidates usually forgo the right to read the letters. It would be improper to ask a letter writer or a program to disclose the information on the eSLOE or to specifically ask where a candidate is likely to be ranked. Therefore, we recommend asking the letter writer for a full evaluation at the end of the rotation, including your grade, and asking how that grade and your overall performance compare to others who have rotated within the last year. We also recommend asking the letter writer about the anticipated level of support for their candidacy, as this approach maintains professional integrity but also informs the candidate of his/her/their anticipated competitiveness.

**At-Risk Candidates:** Rather than simply asking for a SLOE, be more specific and ask if the letter writer is able to write a supportive SLOE. This opens a dialogue that could help you understand your competitiveness.

## **How many eSLOEs do I need to be competitive? Do more of them make me more competitive?**

Depending on some predetermined factors, most candidates in the range of competitive to very competitive will be advised to do two EM rotations at an institution with an EM residency program, and candidates in the less competitive range will be advised to do two or three. It is generally expected to obtain an eSLOE from each of your EM rotations.

Unfortunately, some individuals get advised to do as many EM rotations as possible. However, **more does not necessarily translate to better**. Performing at a high level consistently on three, four, or five EM rotations takes a lot of effort and stamina. Expectations for each subsequent EM rotation are likely to be very high, as you will be expected to have accumulated a lot of experience at that point. There is also a point of diminishing returns for students beyond their second EM rotation. Third, fourth, or fifth EM rotations tend to receive lower evaluations, compared to first or second EM rotations.<sup>9</sup> In addition, **EM is a community that attempts to support its members, and when you elect to perform four or five clerkship rotations, you selfishly keep others from participating**, violating the community-centered principle. Program directors look for these patterns and recognize these behaviors. It is not uncommon for PDs to question candidates who complete more than three rotations. For all of these reasons, we advise students that there is never a reason to do four or more EM rotations.

**Osteopathic and IMG Candidates:** If you are only able to obtain one EM rotation at a residency program due to lack of a home rotation, make the absolute MOST of it to obtain the strongest eSLOE possible. Use EMRA Match to help determine programs' willingness to offer an interview with one eSLOE.

## Does the timing of my eSLOEs influence my competitiveness?

While it is ideal that two eSLOEs are present in your ERAS application at the time of submission, many programs recognize you cannot always complete two EM rotations and obtain two eSLOEs by mid-September. EMRA Match identifies programs willing to offer an interview with zero, one, or two eSLOEs; use this data if you will not have a second eSLOE available by the time of interview offers (October). If you obtain an eSLOE after submitting your application, email programs or message them in ERAS to make them aware that an additional eSLOE is uploaded and ready for review. Refer to **Chapter 5: Applying for Away Rotations** for further data concerning the timing of your rotations to obtain SLOEs.

## How do board scores affect my competitiveness?

Board scores, like eSLOEs, provide another objective comparative parameter. As already discussed, many programs will not interview applicants with a failed USMLE Step 1 or Step 2 score.<sup>4,8,12</sup> The transition of USMLE Step 1 and COMLEX Level 1 to pass/fail has eliminated the numerical predictive value of these tests. Data from NRMP PD surveys indicate any failure of these tests is used for application screening and is an indicator of being less competitive.<sup>3,6</sup> When numerical scores are available, each program has different cut-offs for what they consider to be competitive. Ultimately, the decision to grant an interview is multifactorial, and scores alone may not guarantee nor prohibit an interview.

**Osteopathic Students:** Acceptance of COMLEX Level 1 may change with USMLE Step 1 and COMLEX Level 1 now being pass/fail exams, but that is still unknown at the time of printing.

**At-Risk Candidates:** A survey of EM educators demonstrated that approximately half of programs will not consider an applicant who has failed USMLE Step 1, but almost all do consider applicants with below-average Step scores.<sup>8</sup> Work closely with your advisor to apply smartly and use other sections of ERAS to highlight your competitive qualities and other accomplishments. Applicants who have a USMLE Step failure or lower USMLE scores in combination with a weaker overall application (lower third-year clerkship or EM rotation grades, etc.) need a non-EM backup plan, though applicants with below-average scores in the setting of an otherwise competitive application might not.

## How important is USMLE Step 2?

Recent data indicates 95% of PDs desire a USMLE Step 2 score to offer an interview.<sup>3</sup> Only 5% of PDs do not consider Step 2 in their decision to offer interviews. Thus, your safest bet is to complete Step 2 in time for your score to be released by mid-September.

**Osteopathic Candidates:** Available data indicates that taking USMLE Step 2, in addition to COMLEX Level 2, will open more opportunities for residency interviews. Doing well on USMLE Step 2 can bolster your application and help you be viewed on an even playing field with allopathic applicants.

**IMG Candidates:** Aim for a USMLE Step 2 score of > 240 to be competitive.

**At-Risk Candidates:** Students with a history of a USMLE Step 1 or COMLEX Level 1 failure should plan to take USMLE Step 2 in time to have the score available when ERAS opens for programs to view.

## What is a good score on USMLE Step 2 for applying to EM?

- Marginally competitive: < 220 (including any failed USMLE Step 2 attempt)
- Less competitive: 220–239
- Competitive: 240–259
- Very Competitive: > 260

## How important are my preclinical and clinical grades?

While basic sciences grades have been ranked lower in terms of importance to residency programs, performance in required third-year clerkships is cited as being heavily valued in multiple studies.<sup>3,6,8</sup>

Emergency medicine rotation grades have been cited as very important to PDs year after year.<sup>3,6,8</sup> However, students and PDs are aware that a grade alone does not translate directly into a certain level of competitiveness. Schools vary widely in terms of grade distribution (percentage of honors vs. high pass vs. pass grades). So, while a pass grade generally equates to lower competitiveness, this may not be the case on a pass/fail rotation or a rotation with a very high percentage of pass grades. Likewise, an honors grade generally equates to higher competitiveness, but this may not be the case if the majority of students at an institution obtain an honors rating on that rotation. Grade distributions are conveyed to PDs through eSLOEs and the MSPE.

For both non-EM and EM clerkships, an upward progression of grades through rotations will be well-received and a downward progression may be more poorly received.



## How important are extracurricular activities?

Extracurricular activities are a good way to show yourself as an individual and display what mattered enough for you to volunteer your time. Interestingly, PDs tend to weigh extra-curricular activities more heavily than research activities for both interview selection and ranking.<sup>3</sup> This often comes up during interviews, so be ready to discuss anything you are listing on your ERAS application. Leadership roles and involvement in medical school administration or interest groups can convey your dedication and work ethic. Focus on extracurricular activities that demonstrate leadership, commitment, and hard work.

## How many volunteer experiences should I have?

Volunteer experiences are not overly influential in determining your competitiveness.<sup>6</sup> However, they are tracked in ERAS, and PDs tend to cite them as having moderate influence, with about 60% of PDs citing them as useful in selecting candidates to interview. The type of volunteerism, commitment to volunteerism, or leadership in these activities likely outweighs the number of volunteer activities.

## How important are work experiences when applying to EM?

Generally, EM-related endeavors help your application. Examples of these may include work as a scribe in an ED, work as an EMT or paramedic, or other work in the health care field. Prior jobs incorporating multi-tasking and customer service skills, such as waiting tables, may also be viewed as helpful. Prior work experience is not weighted as heavily as other factors when inviting applicants for interviews or selecting candidates for ranking.<sup>6</sup> Most candidates who successfully match into EM have at least one or more work experiences listed, with an average of 3.4 work experiences.<sup>13</sup>

## How important is research when applying to EM?

The amount of research experience is not generally very influential in determining the competitiveness of a candidate.<sup>6,8</sup> This will vary from program to program. Programs with prominent research efforts may emphasize research. Four-year residency programs also place a greater emphasis on research and publications compared to three-year programs.<sup>8</sup> It is important to note that most candidates who successfully match into EM have at least two research experiences, and an average of three, though not all of this research pertains to EM.<sup>6,13</sup>

**Military Match:** Research is typically more important in military applications than civilian applications, as research is given a high degree of weight in the military point system.

## What criteria might significantly change my level of competitiveness?

- Academic struggles, such as failing Step 1/Level 1 or Step 2, or failure of a preclinical course or clerkship
- Unexplained gaps in medical education or unexplained intervals in the CV
- Professionalism issues, including academic misconduct
- Criminal convictions, including felonies or misdemeanors

**At-Risk Candidates:** While not all of these carry equal weight, any one of them can negatively affect your application. A 2018 survey suggests that academic misconduct is most concerning, with 100% of residency leadership respondents never or rarely interviewing these candidates. The next most concerning red flag was clerkship failure, with 94% never or rarely interviewing these candidates.<sup>10</sup>

## SO, HOW COMPETITIVE AM I?

The following competitiveness-based recommendations take into consideration the data cited thus far. **Please remember the following recommendations are general guidelines and should never replace advice from an experienced EM-specific advisor** who is familiar with you and your application's strengths and weaknesses.

Further, we highly recommend the use of data-driven resources to guide your sense of competitiveness. Such resources include the AAMC's Residency Explorer tool and Texas STAR, which can help candidates determine relative competitiveness for an individual program. Unless a student is overwhelmingly competitive in all categories, it is incredibly difficult to determine if they are competitive for all programs. **Competitiveness at each program will be determined by the culture and characteristics of that program.** For example, program A may be a university-based program, in a desirable urban setting, with many resources, a "prestigious name," and extensive research funding and productivity. Program A may emphasize high board scores and research experience, and they might only consider applicants from select medical schools. Program B may be community-based, either suburban or rural, emphasize diversity, wellness, and community service, and may therefore more heavily weight service, volunteerism, and a background that supports a

candidate's ability to integrate into the culture of the program. Neither program is better nor worse, but each has different attributes and strengths, for which they will try to select ideal candidates. Very few medical students will be ideal candidates at both programs, and that's perfectly fine — because each program offers something unique and different. For this reason, it's very hard to say that a student is universally competitive. However, for ease of understanding, we will attempt to break down aspects of competitiveness that students may use to help assess their status.

The following recommendations for the number of applications are considerably lower than the average number of applications per applicant to EM (55 according to AAMC's 2023 preliminary data)<sup>14</sup> and represent an area where **applying strategically rather than in larger numbers will have a better return on investment.**

## Marginally Competitive

Your application will have some of the following criteria but likely will not overlap that of any other category:

- USMLE Step 1/COMLEX Level 1: Failure<sup>13</sup>
- USMLE Step 2: < 220 or failure<sup>13</sup>
- Only one EM rotation with no higher than a passing grade\*
- No eSLOEs or an eSLOE that is not supportive
- Little or no exposure to EM in extracurricular projects or interest groups
- Presence of a red flag: academic struggle (failed Step 1 or Step 2, failure of a pre-clinical course or clerkship), gaps in medical education or CV, professionalism issues, academic misconduct, criminal convictions, etc.

How this affects your application strategy:

- While USMLE/COMLEX scores alone are not an indicator of suitability for EM, a failure or below-average scores combined with other factors such as an absence of an eSLOE or unsupportive eSLOE means you are at risk.
- You may not be well-suited for a residency in EM or may have to overcome significant obstacles. You should consider a search for alternative plans by applying to a different residency type altogether, but you may consider a parallel plan if you strongly desire (simultaneously apply to both EM and a different residency type as a backup/alternate).
- You may be tempted to apply to as many rotations and residency programs as possible. However, the return on this time and monetary investment will be poor. If you are a marginally competitive candidate, seek guidance from both an EM advisor and a general academic advisor to develop an appropriate application strategy.

## Less Competitive

Your application likely will have some of the following components and none of the components of a competitive or very competitive candidate:

- USMLE Step 2: 220-239<sup>13</sup>
- Fewer than two eSLOES supporting a residency in EM
- Passing grades on EM rotations or a combination of pass and high pass grades\*
- Limited exposure to EM through extra-curricular projects or interest groups

How this affects your application strategy:

- You may be well-suited for emergency medicine but should develop a residency search strategy with an experienced, dedicated, EM-specific advisor to optimize chances and align resources.
- **You should plan to apply to about 35–45 programs** with which you are well aligned in the above categories based on NRMP, Residency Explorer, or EMRA Match data.<sup>13</sup>

**Osteopathic Candidates:** Do not be deterred if you fall in this category. Focus on finding an EM advisor and researching historically osteopathic-friendly programs. Your likelihood of matching is still very high if you apply smartly.

## Competitive

**The vast majority of applicants fall into this category!** Your application will have at least two of the following components, but also may have some criteria of a very competitive or less competitive candidate:

- USMLE Step 2: 240-259<sup>13</sup>
- Two eSLOES that support a residency in EM
- A combination of pass, high Pass, or honors grades on an EM rotations\*
- Demonstrated commitment to EM in EM-related volunteer, research, or work projects

How this affects your application strategy:

- You are well-suited for a residency in EM and have a good chance at matching. General advising resources will apply to you, though an EM-specific advisor is best at guiding you to success.
- **You should plan to apply to about 25–35 programs** with which you are well aligned in the above categories based on NRMP, Residency Explorer, or EMRA Match data.

## Very Competitive

Your application will have two or more of the following components:

- USMLE Step 2: > 260
- Two eSLOEs that strongly support a residency in EM
- High pass and/or honors grades on EM rotations\*
- Demonstrated commitment to EM in EM-related volunteer, research, or work projects.

How this affects your application strategy:

- You have a great chance at matching in EM and general advising resources and advice will apply to you, though an EM-specific advisor is best at strategizing for success. An applicant in this category should pursue their interests in the specialty and follow usual advice for the Match.
- **You should plan to apply to about 20–25 programs** with which you are well aligned in the above categories based on NRMP, Residency Explorer, and EMRA Match data.

\*Some schools only give pass/fail grades or administer a very low percentage of high pass and honors grades. Letter readers will be able to see this and determine your performance based on other components of the eSLOE, including comparison to your peers, but a pass/fail-only course makes it more difficult to determine your own competitiveness. In this situation, it is especially important to ask your letter writer the anticipated level of support their eSLOE will convey.

**Couples Match:** In a 2018 survey, a majority of EM faculty advisors recommend applying to a minimum of 31–50 programs when an “average” EM applicant is participating in the couples Match.<sup>8</sup> Consider applying to geographic locations with multiple programs in both of your specialties.

**Military Match:** Given the small number of military residencies, military students are encouraged to **apply to ALL** available military programs.

**At-Risk Candidates:** Consider the perceived competitiveness of a program to make sure you are applying to programs that are realistically within your reach. Assessing competitiveness is more of an art than a science, but there are several questions you can ask to help make this assessment. First, is the program located in a highly desirable place to live? Second, does the program have “name brand” recognition that would look impressive on your CV? And third, is the program “EM famous” for its faculty or longevity within the specialty? The more “yes” answers, the more applications the program is likely to receive, and the more competitive the applicant pool for the

program is likely to be. You should not refrain from applying to traditionally “competitive” programs, though it may be a good idea to consider these programs as a reach and not include them in your overall number count for applications.

## Tips for Increasing Competitiveness

There are many elements under your control, but by the time you apply to EM, some of them might already be settled. In that case, try these tips:

- Prepare for and do well on USMLE Step 2 early enough that it can be included in your ERAS application at the time of submission in mid-September.
- Perform at your best during your EM rotations, and obtain feedback from early EM rotations and mentors to augment your performance on future rotations.
- Rotate at two EM residency programs, ideally at your home institution and at an away institution. In some cases, a third rotation may be helpful, particularly if your home institution doesn't have an EM residency or if you're a less competitive applicant.

**Military Match:** Rotate and connect with as many military programs as possible. (Joining the EMRA Government Services Committee can help!)

- Find an advisor in EM to help you assess your competitiveness and identify strengths and weaknesses. Ideally, this person should have experience in advising EM students, be part of core faculty of an EM residency program, and might be a clerkship director, PD, or APD. **If you need assistance in finding an EM-specific advisor, email [distanceadvising@cordjobboard.com](mailto:distanceadvising@cordjobboard.com) to get connected.**
- Consider participating in research, getting involved in a national EM organization, and networking with EM physicians. The advice and networking that comes with these experiences can help you as much — or more than — the projects themselves.

**Orphan Applicant:** If your school isn't affiliated with a training program or if it lacks EM faculty for advising, consider joining EMRA, ACOEP, SAEM, or other professional organizations. Through EMRA's Student-Resident Mentorship Program, you can be paired with a resident mentor. Students can also participate in large-group virtual advising sessions through EMRA Hangouts. Keep in mind that you can also seek out advisors and mentors at programs where you rotate.

**Osteopathic Candidates:** Seek out early mentorship from someone connected in EM!

**IMG Candidates:** Mentorship in EM is always very helpful and helps keep you on track. As mentioned, through EMRA's Student-Resident Mentorship Program, you can be paired with a resident mentor.

**Latecomers:** If you are a latecomer to EM, then you likely have a previous advisor in another specialty. Outside advice will be helpful, but only EM-specific advisors will understand the entire process.

**TABLE 8.1. Recommendations Based on Competitiveness**

| Applicant Competitiveness | Step 2  | eSLOEs                | EM Grades* | Other Characteristics               | Recommendations  |
|---------------------------|---------|-----------------------|------------|-------------------------------------|--|
| Marginally Competitive    | < 220   | None/Not supportive   | Pass       | Presence of red flags               | Seek advice and consider an alternate or parallel plan |
| Less Competitive          | 220–239 | < 2 supportive        | Pass/HP    | Limited EM exposure                 | 35–45 applications                                     |
| Competitive               | 240–259 | 2 supportive          | Pass/HP/H  | Commitment to EM-related activities | 25–35 applications                                     |
| Very Competitive          | > 260   | 2 strongly supportive | HP/H       | Commitment to EM-related activities | 20–25 applications                                     |

## THE BOTTOM LINE

- ✓ The vast majority of applicants fall into the competitive category — and despite your anxiety, the likelihood is that you do, too!
- ✓ Competitiveness for EM residency programs is determined by a number of variables, many of which you can control or contribute to.
- ✓ In general, being professional, scoring well on your board exams, and performing well on your EM clerkship tend to play the largest role in determining competitiveness.
- ✓ While great board scores can get you in the door, they are not as important when ranking — this is where intangibles like your interpersonal skills come into play.
- ✓ Your application, just like you, is multifaceted. There is no magic formula that guarantees success in the Match. Work with your advisor to assess your own competitiveness by considering elements that are given the most weight by program directors and residency programs, as well as elements that have trended towards success in past matches.





# Interview Season Logistics

The interview season can be both an exciting and memorable part of your journey through medical school. While the logistics of planning your interview trail can seem daunting at first, whether in-person or virtual, understanding some trends in the NRMP Match data and preparing in advance can ensure you make the most of it. In recent years, there has been a reliance on virtual interviews. **Since we do not yet know how recommendations regarding the format for interviews may change over the years, it is crucial that you reach out to your medical school and advisors to understand the expectations for in-person vs. virtual interviews for each interview season.** However, regardless of the format of interviews, there are some specifics about the interview process you should understand.

## How important are residency interviews?

Residency interviews play a crucial role in your Match success. Each interview is a way for the program director, faculty, and residents to get to know you personally. Your performance on interview day is a significant factor in determining your placement on the program's rank list.

In the 2021 NRMP Program Director Survey, 82.4% of programs considered interpersonal skills an important factor in ranking applicants — the highest endorsed response of all personal characteristics measured. Additionally, greater than 70% considered interactions with faculty and residents on interview day a key component. Together, these were considered to be more important elements in ranking applicants than USMLE/COMLEX scores, class ranking, volunteer/extracurricular activities, personal statements, and post-interview communications.<sup>1</sup>

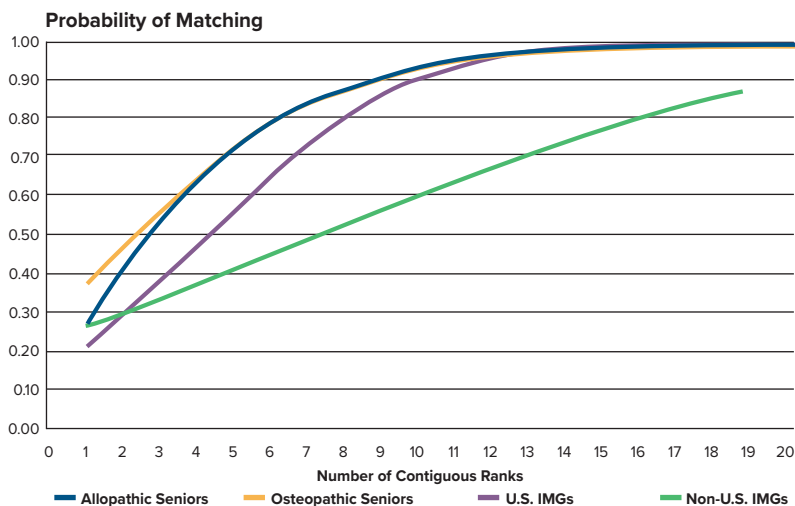
## How many interviews should I go on?

There is no universal answer to how many interviews will guarantee a match, but NRMP data can guide you. Your match depends on how you rank your programs and how the programs rank you. A match can only occur if both parties are ranked by one another, and programs will only rank you if they've interviewed you.

The probability of matching is related to the number of contiguous ranks. For MD and DO senior medical students, the probability of matching is 80% at around 6-7 contiguous ranks and becomes > 95% at around 11-12. The mean number of contiguous ranks for matched MD and DO seniors is 15 and 12.6, respectively.<sup>2,3</sup> Therefore, the typical applicant should aim for a number of interviews within this range. International medical graduates (IMGs), particularly non-U.S. IMGs, likely need to aim for a higher number (see figure 9.1).<sup>4</sup>

**In Chapter 8: Understanding Your Competitiveness: Apply Smarter, Not Harder, you can find information to assess your competitiveness.** Remember, application recommendations exist to support you in obtaining 11-12 interviews. With a 100% match rate into EM for all U.S. MD and DO seniors (not including those who dual-applied) with at least 11 ranks in 2022, accepting greater than 14 interviews could very well be considered a *faux pas* to your peers and future colleagues.<sup>2,3</sup>

**FIGURE 9.1. Probability of Matching to Preferred Specialty by Number of Contiguous Ranks<sup>2-4</sup>**



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**IMG Candidates:** For non-U.S. IMGs, 14 contiguous ranks correlates to an ~87% probability of matching (nears 100% for U.S. IMGs with 14 contiguous ranks).<sup>4</sup> Some programs will not interview IMGs, and this data is available as a filter on EMRA Match. The overall decrease in applications to EM may lead to an increase in receptiveness to IMG candidates, but it will take time to know if this is the case.

**Latecomers:** If you applied particularly late in the season, you might face challenges getting the recommended number of interviews. If this is the case, work closely with your advisors and consider the following:

1. You can intentionally go unmatched and try to SOAP into an EM training position. Before 2022, EM had historically had few, if any, unfilled spots. With the decreased number of applicants to EM overall, for the foreseeable future, there will likely be EM positions available in the SOAP (Supplemental Offer and Acceptance Program). However, this might change from year to year, so intentionally going unmatched and relying on the SOAP to match comes with significant risks.
2. With your advisor's help, develop a backup plan. Depending on your situation, this may mean dual applying to a preliminary/transitional year and/or another specialty. If you plan to re-apply in EM, make sure you understand GME funding rules to avoid future complications.
3. Many medical schools have an opportunity to split fourth year. This maintains your eligibility for the Match, does not create a gap year in your application, and maintains financial aid and GME funding.
4. Don't expect to be able to complete a different residency, such as family medicine or internal medicine, with the expectation of practicing EM afterward. This is advice that many individuals outside of EM will offer as a secondary option. As EM grows, the demand for ABEM board-certified physicians also grows. Without completing an EM residency, you will not be board-eligible. This leads to VERY limited job opportunities.
5. Above all, speak with an EM-specific advisor and your medical school deans about your options. Each program, applicant, and application is different, and expert advice and assistance can make a difference in whether you match.

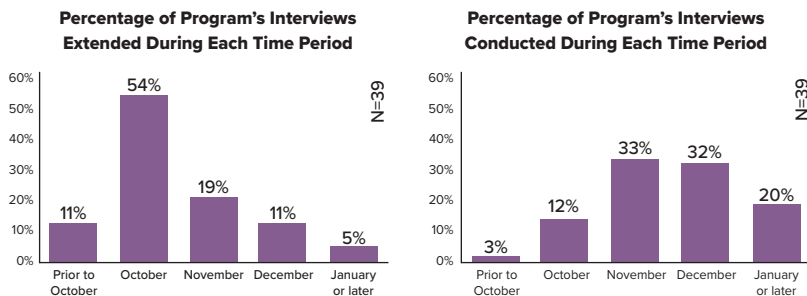
## Juggling the Schedule

In the past several years, the CORD County Program Community of Practice has selected a “unified interview release date”, in which all EM programs (not just county programs) can voluntarily participate. In 2022, more than 55 programs participated, extending interview invites on October 19 and opening interview scheduling on October 20. **Make sure to check out the EMRA and CORD websites and social media accounts for upcoming unified interview release dates, as you will want to ensure you have adequate time on these dates for accepting offers and scheduling interviews.**

The majority of interview invitations are extended in October; however, additional invitations occur throughout the entire interview season as students

cancel and more dates become available. Generally, interviews are conducted in October through January, with the majority occurring in November and December. Appropriate scheduling and planning of your academic schedule is a vital part of ensuring that you have the availability to attend your desired interviews.

**FIGURE 9.2 Interview Activity<sup>5</sup>**



**Couples Match:** Coordinating interviews is less of a concern with virtual interviews and travel costs not being a factor, but it is still nice to be able to compare notes with your partner in real time. For any in-person interviews, many programs will work with you to try to coordinate the timing of your interview to align with your partner's.

**Military Match:** Students must arrange interviews with programs separately from the MODS application, often via email with the program coordinator early in the year. If you are offered the choice between a video or in-person interview, try to schedule an in-person interview whenever possible. Consider scheduling civilian interviews late in the season (mid-December to January). This allows adequate time to cancel your interviews if you match in a military program.

During the interview-heavy months, one strategy is to dedicate an entire month to interviews if your school allows it. Another strategy is to purposefully schedule rotations that are less rigorous or do not necessarily have clinical requirements. If you cannot arrange for such a schedule, talk to your advisor about elective options that are more conducive to being available for interviews.

**At-Risk Candidates:** If you are a less competitive applicant, early interviews might not be as forthcoming. It may be beneficial to plan to take off January for interviews rather than one of the earlier months.

**Latecomers:** Depending on when you submitted your application, leaving January available for interviews may be a good plan for you, too.

Remember, programs generally offer an optional social event — either a dinner for in-person interviews or a virtual meet-and-greet experience. This may be held the night before, the night of, or sometimes the night after your interview. While these events might not be expressly mandatory, attendance is strongly recommended. These informal gatherings are an important way to meet the residents, learn about the culture of the program, and show your interest. Notably, these events are also a key way for programs to get a sense of how you interact with your future colleagues.

Exercise caution when scheduling multiple interviews back-to-back. For in-person interviews, this might be helpful or necessary in cutting down on travel costs or time away from clinical duties. However, prolonged periods of travel can also be exhausting and may adversely affect your performance on interview day. Interviewing virtually can be similarly taxing. Appearing tired may be misinterpreted as being disinterested and can potentially hurt you in the ranking process, so avoid scheduling more than three interviews in a week until you get a sense of your personal endurance and preference on this.

## Communication and Scheduling Etiquette

Interview offers may be extended through a scheduling system (eg, Interview Broker, ERAS Interview Scheduler, Thalamus, etc.) or sent directly from the program itself. Applicants typically receive notification of interview offers via email. Sync your email to your mobile device or even create a separate email account specifically for the ERAS application and interview season to ensure you don't miss any offers. It is also a good idea to routinely check your junk or spam folders in case some invitations are accidentally routed there.

**Handle interview invitations promptly.** As of the 2023 NRMP Match, it is a violation if programs send out more interview invitations than available interview spots.<sup>6</sup> However, more desirable interview slots might fill quickly after invites are sent. When securing a spot, there may be an option to choose either the morning or afternoon. Once scheduled, programs such as Interview Broker will email a confirmation to you of the date/time of the interview. If you find yourself using multiple websites or applications to schedule interviews, it may also be advantageous to dedicate a planner or calendar to keep track of all of your interviews.

**Be professional if you need to cancel.** Some cancellations are necessary because of scheduling conflicts with your clinical rotations or other commitments. Others may be canceled because an applicant feels they have scheduled enough interviews to secure a match. No matter the reason, advance

notice is a *must*. Try to cancel far enough in advance to allow the program time to find another applicant to take your place. Generally, cancellations should not be made less than two weeks from the date of the interview — a month or more beforehand is ideal.

**Don't harm your chances before you even arrive for the interview.** Other scheduling behaviors that reflect poorly on you include interview hoarding, double-booking, and no-shows. In the rush of initial interview offers, it's tempting to accept every offer — even if you have no real interest in a program. Resist this urge. Remember that everything you do can be evaluated by programs, and unprofessional behavior can dramatically influence programs' perceptions of you. Once you have obtained enough interview offers at programs where you have a genuine interest, it is unnecessary to hoard additional interviews. With enough cancellation notice, those spots can be freed up for other students.

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*Once you have obtained enough interview offers at programs where you have a genuine interest, it is unnecessary to hoard additional interviews. Free up those spots for other students..*

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If you double-book, decide which interview you will attend and let the other program know you will need to cancel as soon as possible. While double-booking can be tempting, particularly if you are unsure which program you like best, understand that it is highly frowned upon. In fact, scheduling services actively combat them through different policies. ERAS does not allow any double booking. Interview Broker has a double-booking policy that notifies both programs at 48 hours if you do not resolve the conflict. Retaining a double-booking past 48 hours may lead to programs rescinding your interview offers. After you submit your applications and while awaiting interview offers, create a pre-ranking list of your programs by desirability. When you achieve an excess of interviews or find yourself double-booked, use this list to choose which interviews to give up.

Finally, it is important to attend the interviews you schedule. No-showing is unprofessional and can hurt your chances of matching. Word can (and likely will) get back to your school's dean and your home institution's PD. Remember this is very much a job interview. Your professionalism is being evaluated at every stage of the process.

**Virtual Interviews.** Beginning in 2020, EM residency interviews switched to an entirely virtual format and continued in this way in the 2022-2023 interview season. While each program has a different style, there are some considerations that will help you stand out in the mosaic of Zoom squares. **See Chapter 10: Making the Most of Interview Day** for more information on virtual interviews.

**Second Looks.** In the era of virtual interviews, many residency programs are hosting optional, formal second looks. This will usually be a weekend with tours of the hospital(s) where you will work, sightseeing, and meeting your potential future co-residents at a lunch and/or dinner. They typically will occur from January to late February, ideally after the program solidifies its rank list and before you submit yours, so be on the lookout for an email invitation. **See Chapter 10: Making the Most of Interview Day** for more information on the logistics of second looks.

## Managing Costs on the Interview Trail

Interviewing is expensive, particularly when done in person. A recent poll showed that nearly all applicants (97%) agree that virtual interviewing has decreased the price tag on residency interview season.<sup>7</sup> Even so, the cost one might spend on traveling to explore cities and institutions on second looks, along with the increasing number of programs to which applicants apply, all add up to a heavy financial burden. While some of these costs are unavoidable, there are a few ways to reduce your expenses for any in-person interviews and/or second looks you might have.

- Use credit cards with rewards programs — and learn the intricacies of those programs.
- Bunk with friends (or friends of friends), and check out services like Swap & Snooze, which arranges free lodging for medical students on the interview trail.
- When possible, stay with residents from the program where you are interviewing. Sometimes this opportunity will be obvious in pre-interview communication with the residency program coordinator; if not, there is no harm in asking.
- Plan your interviews to maximize your travel dollar; cluster interviews geographically.
- Consider driving instead of flying.

Unfortunately, the process of applying and interviewing is expensive, but it is an important investment in your career. Anticipating the cost will allow you to budget appropriately, and careful planning can help alleviate additional stress.

## THE BOTTOM LINE

- ✓ Recommendations regarding in-person and virtual formats for interviews will likely change throughout the years. Always check with your advisor, EMRA, and CORD for the most up-to-date interview season recommendations.
- ✓ Average, reasonably competitive applicants should aim to go on enough interviews to be able to rank 11-12 programs, which correlates with a > 95% chance of matching for U.S. MD and DO seniors.
- ✓ The majority of interview invitations are sent in October, and the majority of interviews are conducted in November and December.
- ✓ Be considerate of your colleagues and programs during interview season. Hoarding interview invitations at programs you don't intend to rank takes away interview opportunities from your colleagues, and if you wait too long to cancel, it makes it difficult for the program to book someone else in your place.
- ✓ Plan your interviews wisely, taking into account practical scheduling factors and other social events that may be offered on, before, or after the interview day.
- ✓ Prepare to budget for travel if you intend on visiting programs or checking out the areas in which they are located.



# Making the Most of Interview Day

**Interview day gives you a firsthand look at the programs you have been researching. This is an important day for the programs as well.** In fact, the interview day score is one of the most important factors programs consider when ranking residents.<sup>1</sup> Make a good impression and understand it's equally important for *you to interview the program* and determine how well it fits your needs and goals.

The COVID-19 pandemic introduced a new aspect to the interview process — virtual interviews. This has had both advantages and disadvantages. On one hand, you can save a lot of time and money by not physically traveling to another city for an interview. On the other hand, it can be more difficult to get a sense of the prospective city, program, and emergency department where you will be working. As noted in Chapter 9, **since we do not yet know how recommendations regarding the format for interviews may change over the years, you must reach out to your medical school and advisors to understand the expectations for in-person vs. virtual interviews for each interview season.**

## Preparing for Interviews

Interviews can be stressful, but adequate preparation leads to success. Practice answering interview questions with a friend, mentor, advisor, etc. Think through ways in which you'll describe yourself, your hobbies, and your reason for choosing EM. Plan standard questions for every interview, with specific questions for individual programs. This will allow for a more natural conversation, and you won't have to do all the talking. Take a look at the EMRA Interview Guide for ideas of questions that might be asked.<sup>2</sup>

Most important: Be yourself on interview day. You have made it thus far in your career, so you're clearly a bright, intelligent, and successful individual. The interview is the time to let your positive qualities shine, even if you're naturally introverted. Residency interviews help the program faculty and residents get to know you as a person, and they also help you decide if the program is a good fit for you.

## Do Your Research

One of the best ways to put yourself at ease and impress your interviewers is to do your research beforehand. Be sure you have reviewed the program's website and other readily available information.

1. **Know the program leadership** — particularly the chair, PD, assistant/associate program directors (APDs), clerkship director, chief residents, and the program coordinator. This can help you tailor your questions to the individual who may answer them most effectively. You can reach out to the program coordinator ahead of time and ask who you will be interviewing with if you want to further investigate their particular interests.
2. **Review basic program demographics** — class size, required off-service rotations, and secondary training sites. You should come to every interview with questions written down that are important to you. *Don't ask questions easily answered by visiting the program's website.*

## Take Notes

Interview season can be a long road — by the end, some of the program details and your memories of them will begin to blur. Notes on who you met, whom you interviewed with, the questions you asked, the answers to your questions, or general conversations with key members of the program will be an important reference when the time comes to make your rank list. It will also be useful if you need to reply to the program and its members.

## Pre-Interview Events

Most institutions host pre-interview “hang-outs” (either virtual or in-person) with the residents; take advantage of these opportunities whenever possible. Of note, some newer programs may not have enough residents yet, so you'll get a chance to speak with the faculty informally. Occasionally travel plans and other interview schedules may interfere with your attendance at these events, but try not to miss them. The more direct face time spent at a program, the greater the potential benefit for you and the program. Applicants have ranked “personal experience with residents” as one of the most important factors when making a rank list.<sup>3</sup>

Just as with interviews, the more face time you can obtain with a program, the more likely you are to make an impression and stand out among the crowd. These events are generally run by the residents and are typically less formal than your interview day. However, keeping some professionalism would be wise. Consumption of alcohol is generally accepted in moderation at social events — but remember every interaction with a program is an extension of the

interview day, and residents will likely report back to their administrators about any concerning behavior. If the social is scheduled for the evening before your interview, keep in mind you have a busy day scheduled for the next morning, and most interview days begin early.

During the social events, inquire about specific questions you have about the city and program (eg, Where does everyone live? Is it a safe area? What rotations does everyone like/dislike?). It can be challenging to share screen/face time with the other interviewees, especially if you tend to be quieter. If you are worried you might fade into the background, come prepared with 2-3 questions that you want answered during this time. These can be related to the program or your hobbies/interests, which might spark more organic conversation. If you fall on the opposite end of the spectrum, try to keep in mind that taking too much of the shared time might make you seem like less of a team player.

## In-Person Interviews

The less rushed you are in the morning, the more relaxed you will be. Give yourself plenty of time to get dressed, as well as pack your bags and head to the interview for in-person interviews. Ideally, check out from your lodging should be later in the day or the following day, giving you time to explore, or at least change and pick up your bags. However, this may be impractical in terms of cost and travel plans, in which case you'll need to factor checkout time into your schedule. Most programs can keep your bags safe for you during your interview day, although space may be limited.

**Military Match:** The military uniform for interviews is important. Make sure to discuss this with upperclassmen/classmates or reach out to a mentor.

Arrive a little early, giving yourself a window for any delays (getting lost, traffic, parking, etc.). Although most programs are reasonably understanding of delays, being late gets you off on the wrong foot. The food and breakfast options provided by a program on in-person interview mornings may vary significantly (full meals to very little), so grab a meal before you arrive if time permits, or plan on bringing something with you.

The interview day generally begins with an overview of the program, typically delivered by the PD. This will answer many questions, though the focus usually will be on the strengths of the training experience. A tour of the ED and other parts of the hospital are also typical components of the day.

The interviews themselves tend to be several separate short interviews, usually one-on-one, with members of the program leadership, faculty, and sometimes residents. Programs may have each interviewer focus on a different aspect

of the applicant, such as academic record, residency and career goals, or personality fit for the program. Don't worry about who's looking for what.

**Being genuine is more important than trying to cater your answers to what you think each interviewer wants to hear.** Most emergency physicians tend to be relatively down-to-earth people who genuinely enjoy having a good, professional conversation with applicants. And remember it is a conversation; don't be a passive participant simply reacting to questions. The interviewers are trying to get to know you, and they want to hear what you have to say.

Anything you have provided in your application is fair game for interview questions, so know your application. If you listed spearfishing as a hobby, you should be able to hold a conversation about it. (Your interviewer may be a spearfisher, too!) Also, keep in mind a tangent is considerably different from a conversation. Keep your answers concise.

**Couples Match:** If you have not disclosed that you are couples matching, you are not required to discuss your situation in your interview, but it can be helpful to mention connections that you and/or your partner have to the area. If your partner has already completed their interview and liked the program, you can consider mentioning this as well. Discuss your strategy with your partner and advisors.

**IMG Candidates:** This is also an opportunity for you to demonstrate how your experiences at your home institution can contribute to your career.

**At-Risk Candidates:** If you are applying to another specialty as a backup in parallel with your EM application, this will not be evident to reviewers or interviewers. You are under no obligation to divulge this to programs and interviewers.

Remember during the interview that *you are also interviewing the program*. You need to find out if this is the right place for you to spend the next several years. You should be prepared with questions about the characteristics of the program that are important to you. Ask more than one member of the program, as they may have different perspectives on the issue. Also, some potentially important details may not be clear from the website or general program overview presentation (eg, clinical and didactic teaching styles, program goals for the future, recent changes made to the program structure, resident wellness, resident retention and remediation, and changes in staffing). Do not be afraid to ask for contact information for current residents or graduates from their program. There is no better way to assess a program than by talking to someone who has been there.

At the end of the interview day, you may be tempted to grab your things and go. However, after in-person interviews, this is often a wonderful time to stay and observe how the department flows during a shadow shift. Most programs are happy to have interviewees spend time in the ED as an observer. Keep in mind that protocols around having observers may have changed because of COVID-19 safety protocols, but it doesn't hurt to ask in the weeks leading up to your interview if you can do a shadow shift if in town for an in-person interview or second look. Viewing the interactions on shift can give you a lot of insight. Do the residents and faculty seem happy? Does the team appear cohesive? What kind of patient load is each resident carrying at each stage of their training? Are there pleasant interactions between the ED team and their consultants? Introduce yourself to anyone and everyone, and ask if you can tag along. You can even consider traveling with an extra pair of scrubs. Again, make notes on this portion of the visit.

## **Virtual Interview Day**

Though the process of virtual interviews is still new, early literature from other specialties suggests there may not be a significant difference in match rates between in-person vs. virtual interviewees, and applicants surveyed tended to perceive more advantages than disadvantages to virtual interviewing.<sup>4-5</sup>

Just as with in-person interviews, preparedness will only help calm your nerves and therefore improve your performance. Some residencies offer a choice between morning or afternoon interviews, so it is important to consider which would be more beneficial to you. Consider whether or not you will have any other responsibilities the rest of your day that may distract you such as a lecture or showing up for a clinical rotation. The night before, make sure you check and recheck the interview start time and time zone. Ensure you wake up with enough time to get ready, including eating a meal. Interview day can be long and tiring, so make sure you grab a couple of snacks, water, coffee, etc. — anything that will help sustain you. Do a sweep of the room to double-check that your background is tidy and professional. Finally, 10-15 minutes before the interview starts, you should log in to the virtual platform and do a quick audio and video check. Remember, attire should be professional — just as you would dress if you were interviewing in person.

To make the most of the virtual interview day, remember these interviews should be just as professional as in-person interviews. You should set up or create a space specifically for your interviews that is organized, clean, and quiet. Having a messy room or a dog barking in the background may be distracting for you and your interviewers. The background you choose should also be intentional, as any objects in your background may be fair game for conversation. If you are unable to find a suitable space in the comfort of your home, try looking for a

study space in your medical school library or borrow a friend or family member's office space. The dress code is also the same as for in-person interviews, and that includes bottoms. You don't want to be the person everyone remembers because they were wearing pajama pants! So wear a suit or other business dress, as it may help you get into a professional mindset for the day.

Virtual interview formats are generally similar to in-person interviews, plus or minus a virtual tour of the ED. You will likely have a general introduction to the program followed by several short interviews or even one long interview with several interviewers at once. Some programs may place you in a virtual room with other faculty, interviewees, or current residents while you await the next interview. Though you are generally not expected to stay on screen for the entirety of this waiting period, it is a great opportunity to get to know the people at the program and ask any further questions you have about the program and/or city. If you do choose to take an off-screen break during this time, keep in mind your mute button may not always be trustworthy! Lastly, test out your equipment before the interview day. The last thing you want is for your time to be eaten up by a technical malfunction.

## Red Flags

The interview is an opportunity to explain any red flag(s) in your application. At least one interviewer will ask you about it. Remember, if anything in your application was disqualifying, they would not have invited you for an interview. Avoid making excuses. Briefly explain the red flag(s) and do not dwell on negativity — remember there is something to be learned from every negative event and strength in recovering from such.

**At-Risk Candidates:** If your application has any red flags, such as failure of a USMLE/COMLEX exam, pre-clinical course, or clerkship, a prior felony or misdemeanor history, or extended time off in medical school, be prepared to address these topics in the interview. As in the personal statement, take responsibility, don't make excuses, and most importantly, articulate how you have emerged from these challenges better prepared for a career in EM. Practice answering red flag questions out loud with a friend or advisor.

## The Second Look

In the era of virtual interviews, many residency programs are hosting optional, formal second looks. This will usually be a weekend with tours of the hospital you will work in, sightseeing, and meeting your potential future co-residents at a lunch and/or dinner. Attire can be clinical, including badge and white coat, or business attire, depending on the scheduled events. They typically will occur from January to late February, ideally after the program solidifies its rank list and

before you submit yours to allow for equity, so be on the lookout for an email invitation.

The second look is another way to gain additional insight into a program, especially when having difficulty with deciding among the programs at the top of your rank list. Second looks can be a considerable added expense and are not expected. Visiting every program where you interviewed is completely unnecessary; second-look trips are only beneficial if you are having difficulty choosing between programs. You are there to get a better idea of how and if you fit into the day-to-day interactions at that program.

Remember, just as with pre-interview hangouts, consumption of alcohol at second-look social events is generally accepted in moderation — but remember every interaction with a program is an extension of the interview day, and residents will likely report back to their administrators about any concerning behavior.

## Scoping Out the Area

When traveling to a city or region that is new to you, explore the area. Finding a location where you will be happy spending your free time is important to your future wellness. The pre-interview events are also a great opportunity to find out more from residents about the area.

When evaluating a new area, consider what is important to you. Would you prefer to live in a house with a yard, a condominium, or an apartment? This is determined not only by the region (a house with a yard may be less obtainable in a larger, urban setting) but also by your personal needs (family, children, pets) and the prospective duration you might be there (3- or 4-year program, fellowship, employment goals). You also need to think about which of these choices is affordable on your income. Resident salaries are fairly consistent across the nation — unlike the cost of living, which varies dramatically. Finding out what areas of the city the residents and faculty live in can be helpful.

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*Interview season should be fun. Do your research and prepare, but don't forget to be yourself. This is your chance to find the program that is the best fit for you.*

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In addition to housing options, learn what there is to do in the area. Are there local parks? How varied are the dining and entertainment choices, and are they affordable? Where do the residents go to unwind? If you have children, you'll want to know how the schools rank, if they are close by, and (if you're evaluating private schools) whether they're affordable. What amenities and activities does

the area have for children? If you have a significant other, it might be beneficial to have them scope out the area with you. If you find yourself more impressed than expected by a program or its location, consider coming back for another visit for a second look before submitting your rank order list (see *The Second Look*, above).

As you're planning your visit, research the hotels near the program. Often, the closer, the better — although many hospitals with thriving emergency departments can be located in less safe areas, so keep that in mind. Also, consider the area around the medical center may have a very different atmosphere than the surrounding city, so make sure to explore the city before making a final impression. Additionally, some programs offer on-site lodging and will usually inform you of this. It has become increasingly common for residents to invite interviewees to stay with them, giving you a window into the resident lifestyle in that area.

## Thank-You Notes and Further Communication

It is common courtesy to thank your interviewers for their time; however, the overall value of the thank-you note varies greatly among program leaders. Generally, an email is just as acceptable as a handwritten letter, although there is likely some variation in this belief. There is no rule on the timing of the note, but it is best to send it immediately after the interview — before it moves too far down your to-do list. Sending a note is unlikely to significantly change the way a program ranks you, although it cannot hurt and is a common professional courtesy that will be noticed as your career continues.

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*Be diplomatic yet honest in all post-interview communication. Don't read too much into any program's response (or lack thereof), due to NRMP restrictions.*

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After interviews, you will be faced with a decision on communicating with programs regarding where they stand on your rank list. This is a much-debated subject without a clear answer. **It is very important to note that you are not required to divulge a program's order on your rank list,** even if directly asked by any member of the program. In fact, NRMP guidelines specifically state “program directors

*shall not solicit or require post-interview communication from applicants, nor shall program directors engage in post-interview communication that is disingenuous for the purpose of influencing applicants' ranking preferences.”<sup>6</sup>*

This guideline is interpreted differently by each program. Some take a hard line and completely abstain from any initiation of contact with applicants. Others may feel that notifying their highly ranked applicants regarding their status is not



“soliciting” or “disingenuous.” And some programs will initiate a discussion of the applicant’s rank list, despite these guidelines.

Be diplomatic yet honest in all post-interview communication. You should not feel compelled to divulge your rank order information to programs, and programs should not be asking. Likewise, **you should never ask a program where you fall on their rank list, and do not rely on the information a program might voluntarily give you about your order on their rank list.** However, the NRMP does not stipulate guidelines for applicants regarding post-interview communication. You may freely disclose to a program where it is ranked on your list — but be honest. The most common practice is to notify your top-ranked program of its position. A program’s response to such information will vary greatly, from no response to a purposely vague response, all the way to a definite answer of your ranking by them. Do not read too much into any response (or lack of response); each program takes a unique approach to comply with NRMP rules.

## THE BOTTOM LINE

- ✓ The interview season should be fun! Do your research and prepare, but don’t forget to be yourself. In addition to the program trying to decide if you’re the right fit for them, *this is your opportunity to figure out if the program is the best fit for you.*
- ✓ Take advantage of pre-interview events to get to know the current residents. They are the ones most likely to give you an unbiased view of what it’s like to train at the program. If consuming alcohol, do so in moderation.
- ✓ Be sure to take plenty of notes to help you make ranking decisions between programs.
- ✓ Second looks are only beneficial if you are having difficulty choosing between 2–3 programs.
- ✓ Don’t spend too much time worrying about thank-you notes. There are no rules, and it’s unlikely to significantly change the way a program ranks you; however, it can’t hurt, and it’s a common professional courtesy.
- ✓ Do NOT play games with any post-interview communication (ie, don’t tell every program they’re your No. 1 program); it’s a small world and it could be very awkward the next time you see a PD to whom you sent a disingenuous message.



# Preparing and Submitting Your Rank List

While navigating the interview season, you should always be thinking about your rank list — comparing and contrasting programs as you go. Create a working list with comments, highlights, and pitfalls, and update it in order of preference after each interview. In doing this, you can place the program you just interviewed with in real-time where it stands in relation to others, all while keeping meaningful notes about your thoughts and feelings in an organized fashion.

## How Does the Match Work?

At the end of interview season, applicants submit a rank-order list of the programs at which they interviewed (and would want to match), from their top choice to least preferred. Similarly, each residency program submits a list of interviewed applicants in order of matching preference. From there, a Nobel Prize-winning algorithm goes to work to find “stable marriages” between applicants and programs. The “stable marriage problem” is well-known in the fields of mathematics, economics, and computer science and is considered solved when there is no pair of matches by which both a program and an applicant would be better off than they are currently matched.<sup>1</sup>

Picture this: You rank a program No. 1, and your No. 1 program has 12 spots available for interns. If that program ranks you in any of their top 12 positions, a match is made (hooray!), and you will not be considered for matches at any other programs. Alternatively, you could also match at this program even if you were lower on their list; for example, let’s say they ranked you 20th, but eight applicants ahead of you ranked and were matched at different programs higher on their lists — you would still match at your top choice!

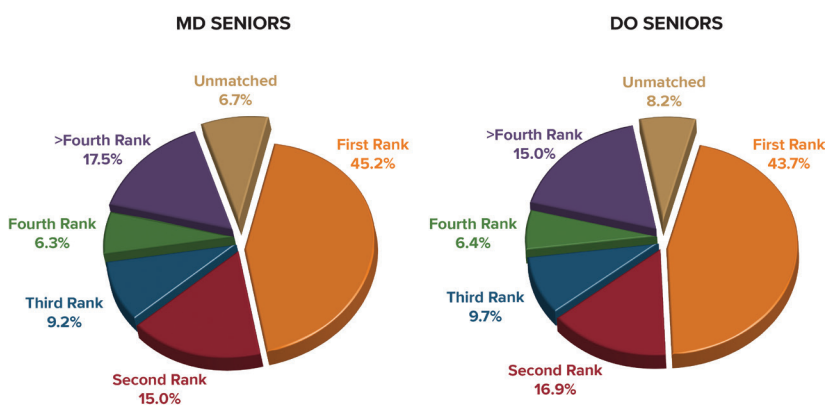
To see a live example of a simulated Match between five applicants to two hospitals with two positions each, visit [NRMP.org/matching-algorithm](http://NRMP.org/matching-algorithm).

It is critical to understand the NRMP algorithm favors your preferences as the applicant. **You should rank programs in the order in which you would truly prefer to match.** Do not try to “game” the system and rank programs based on where you think you fall on their lists. Despite yearly circulating rumors, there

is no gaming the algorithm. Similarly, expressions of interest from a program are not binding — and should be interpreted with caution. Again, always rank programs in your true order of preference. The first program you rank should be your top choice, even if you think it's a reach. Conversely, do not rank a program high on your list just to see if you can match there if it's not truly where you want to end up.

Overall, three-quarters of matched U.S. senior applicants will match at one of their top three choices. For those only applying to EM (not dual applying), the match rate was 98.9% for U.S. MD seniors and 97% for U.S. DO seniors in 2022. *Across all specialties in 2022*, 6.7% of U.S. MD seniors and 8.2% of U.S. DO seniors did not match to any location on their rank list (**Chapter 12: What If I Don't Match?** explains what to do in that case).<sup>2</sup>

**FIGURE 11.1.** Percent of Matches by Choice and Type of Applicant, 2022<sup>2</sup>



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**Couples Match:** To participate as a Match-bound couple, both applicants must be entering the same match cycle and pay a “couples fee.” The NRMP does not define who can couples match — you can couples match with a friend, spouse, partner, sibling, or anyone else who agrees to create a paired rank list with you. For more information, visit [NRMP.org/couples-match-videos](https://www.nrmp.org/couples-match-videos).

## How to Build Your List—What Matters to You?

There is no easy answer or correct way to build your rank list; the “right way” is based on what is right for you. How a training program fits for you, and how you fit in a training program, means many different things to different people. Several factors play a role in this.

Reflect on your professional and personal goals when prioritizing your list. Identify the priorities that matter most to you when comparing programs to rank. Envision yourself at each of these places of training over the next few years.

**See Chapter 4 — Finding Your Fit: Learning the Landscape of EM** for a list of factors that differentiate programs from one another. Some common elements to consider include:

- Length of training (3- vs 4-year program)
- Location of training (geographic location, state, surrounding cities, climate)
- Programs’ affiliated hospitals
- Residency rotation curriculum
- Flexibility of elective time
- Culture of the program, training environment, and support system(s)
- Academic vs. community vs. county setting

If you have already identified interest in potential fellowship training, it may be wise to weigh EM residency programs at sites that have fellowship opportunities more heavily. The flexibility and amount of elective time in residency may also be important if you harbor fellowship goals because it will facilitate dedicated scholarly time and research that will help you prepare for future fellowship applications. Envisioning your future of working at a academic vs. community vs. county hospital or rural vs. metropolitan environment should also be considered in your ranking of programs, as each of these experiences brings uniqueness to each program and training site.

**Couples Match:** Prepare your rank lists separately and then together. As a couple, discuss your priorities (same institution, same city, geographic distance, both partners matching at his/her/their top choice, etc.). Are you willing to have one partner go unmatched? Each partner can submit up to 300 ranks, which sounds like a lot, but the combinations add up rapidly. Avoid making a rank list that would produce any matches in which one partner will be unhappy.

## How Many Programs Should I Rank?

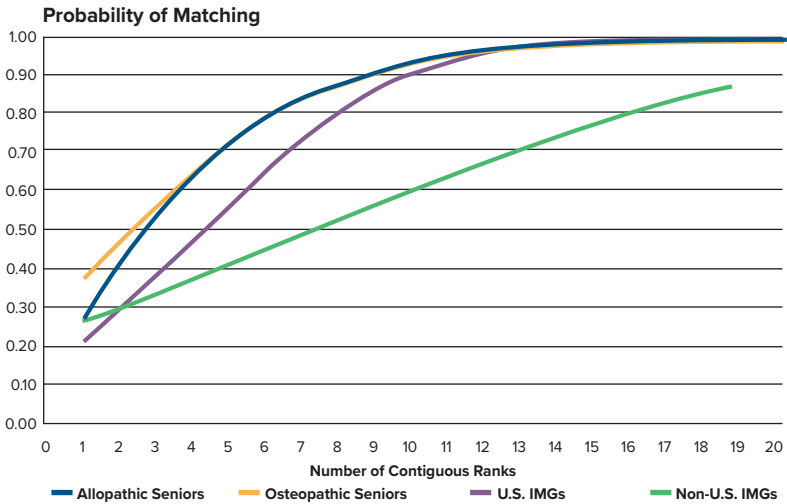
Most would agree an applicant should rank all of the programs at which they interview, with rare exceptions. Consider carefully before choosing not to rank a program. On one hand, it is risky to include a program where you would not be happy training because The Match is binding for both applicants and programs. On the other hand, going unmatched puts you in a much more challenging position if you wish to pursue a career in EM.

Historically there were few to no positions that went unfilled in the EM Match, so “scrambling” (now called SOAPing; see **Chapter 12: What If I Don’t Match?**) into a position after The NRMP Match was unlikely. However, in 2022 there were 219 unfilled positions in EM, prior to the SOAP,<sup>2</sup> and that number more than doubled in 2023. It is hard to know if unfilled positions in EM will be an ongoing trend. Even though SOAPing into unfilled positions might be an option, these numbers can change from year to year. Thus, review the NRMP post-Match results/data from prior years and discuss application strategies with your EM advisor.

*Again — only leave a program off your rank list if you would rather train in a specialty other than EM or not match at all than train there* (hence, the rare exceptions). A program that you weren’t sure about on interview day might surprise you when you arrive to train there. Most EM residency programs will lead you to the end goal of becoming a competent emergency physician. It will nearly always be better to be matched and move forward with your career path than go unmatched with a gap year without structured clinical experience and patient care. Not to mention, entering into a second Match cycle can be extremely daunting and trying for reapplicants.

As mentioned in **Chapter 9: Interview Season Logistics**, except for non-U.S. IMG applicants, ranking 11-12 programs will give you a > 95% chance of matching. The NRMP’s “Interactive Charting Outcomes in the Match” tool and its ranking guidelines can be very helpful as you determine how many programs you need to rank to match and how to rank them, based on your individual competitiveness.<sup>3,4</sup> With the backing of this objective data, it is strongly recommended to not “hoard” interviews, as almost all of these will later appear on your rank list. With a 100% match rate into EM for all U.S. MD and DO seniors with at least 11 ranks in 2022, accepting greater than 14 interviews could very well be considered a *faux pas* to your peers and future colleagues.

**FIGURE 11.2.** Probability of Matching to Preferred Specialty by Number of Contiguous Ranks<sup>3</sup>



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**Military Match:** MODS will allow you to rank five programs. Given the limited number of spots in the military Match, you should rank ALL military programs where you interview.

**At-Risk Candidates:** Rank ALL programs where you interviewed. If you did not interview at enough programs to attain a high likelihood of matching, you have hopefully already developed a proactive backup plan with your academic advisor to SOAP or apply to a second specialty or transitional internship. Preparation is the key to success.

## How Do I Submit My Rank List?

Creating your NRMP rank list requires the creation of an account for the Match at NRMP.org, starting in mid-September with a deadline of late January. This is a different registration process than ERAS; however, it will be linked after establishing an account on both websites. If you have trouble with registration, contact the NRMP help desk or ask your medical school advisor for assistance. Resources abound at NRMP.org, including tutorials and videos explaining every step of the process. It is also important to check the NRMP website for the specific deadlines for the year you are applying!

In January or early February of your Match year, you can start to rank programs in the NRMP's Registration, Ranking, and Results (R3) system. This website will use your credentials obtained when you registered in the fall. *Make sure you have the correct program identification numbers when you enter your rank list.* Some schools/residencies have multiple program codes for different types of applicants and locations. You will then enter the programs into the R3 system in your order of preference. This is where your nifty list you've been keeping updated all interview season becomes exceptionally handy.

After you enter your rank preferences, you will need to certify your list. *You must certify your list BEFORE the ranking deadline* in late-February/early March to have it officially available for matching purposes. You will receive a confirmation email and see the status of your list change to "certified" when you have done this. *You can re-rank and re-certify as many times as you want up until the NRMP's Rank Order List certification deadline!* Certify your list each time you make changes so you will always have an updated certified list in the system. The R3 system does not save old versions of your rank list. As always, do not wait until the final hours to submit and certify, nor login with last-minute jitters to make large (and often irrational) changes. Currently, you are allowed 20 ranked unique programs before you have to pay additional (non-refundable) fees.

## Help! Whom Should I Talk To?

Ask friends, parents, significant others, or objective third parties to help you talk through the programs in which you're interested or to help identify your priorities. If you're bringing a significant other along during residency, deeply consider their input and be sure the locations you prioritize will also have opportunities for them. You should also consult with your advisor to understand how different options may affect your career path. Picture yourself living and training at each of these places for the next several years because it will soon become a reality!

Consider having a pretend Match Day:

1. Place all programs at which you interviewed in a bowl.
2. Have a friend pull a program out of the bowl and read the residency name out loud.
3. How did you feel when that name was read? Ask your friend about their perception of your reaction to each program.
4. If you are taking notes or using a spreadsheet, record your thoughts/responses next to each program.



5. If you are still unsure, “try on” a few programs and exercise your imagination. For one day, pretend you matched at Program A and see how you feel. Then the next day pretend you matched at Program B. This may help clarify your true preference.

Once you have certified your final rank list, your work is done — and the waiting begins. Take a deep breath. Your many hours of hard work will soon be validated. It’s not uncommon to feel a rollercoaster of emotions about your rank list as you count down toward Match Day. Acknowledge them and reward yourself for achieving everything that you have to this point. A whole new journey is closer than you know.

### THE BOTTOM LINE

- ✓ Start a draft of your rank list during the interview season, and keep notes as you go. This will help organize your thoughts in finalizing and certifying your list.
- ✓ Consider your priorities in a training program, what you truly value, and what your ideal future as an EM physician will look like.
- ✓ With rare exceptions, it is to your advantage to rank all programs where you interview.
- ✓ Understand the NRMP Match algorithm favors applicant preferences, so develop your rank list according to *your true preference* rather than trying to “game” the system based on what you think programs might do.



# What If I Don't Match?

## So, you didn't Match?

First, we are very sorry. While you reflect and start to prepare for your next steps, know that **you are not alone — others have been in your shoes and gone forward to succeed.** We hope our words offer a source of comfort and assist you in achieving success, whatever that may mean to you at this stage. As you reflect, it is key that you understand *why* you didn't match. Only with an honest appraisal of what may have contributed to you going unmatched can you plan your best approach to the Supplemental Offer and Acceptance Program (SOAP), reapplication, or alternative career trajectory.

If you are reading this as someone who thinks you may be at-risk of not matching, then you are one step ahead! Meet with an academic EM advisor now to discuss proactive strategies.

## Why Are You Here?

Before you can form a plan to move forward, you need to know *why* you didn't match. External evaluation should be an essential portion of your application review. Any faculty member who told you that not matching would be a possibility is likely a good source. Your dean of student affairs is another good resource, and a sympathetic program director can be a wonderful additional source of information.

Be wary of information from sources such as Reddit, Discord, and other online community groups. While the threads may be helpful, anyone can post anything, so the information may not be 100% sound or truthful. At the same time, they may give you a source of solace, some creative ideas for application modification, and information on new programs or open spots. Thus, take the information from online groups with a grain of salt and follow typical internet best practices.

## Assessing Your Candidacy

Begin by asking yourself, "Did I get at least 11-12 interviews and rank at least 11-12 programs?" If you did not get a reasonable number of interviews, either you

did not apply to enough of the right programs, or something in your application was limiting you.

Evaluate the six elements of your application to find weak spots that may have caused you to not match (revisit **Chapter 8: Understanding Your Competitiveness: Apply Smarter, Not Harder**).

- **Step Scores:** With Step 1/Level 1 now transitioned to pass/fail, there will probably be an increased emphasis on USMLE Step 2. If you did not take Step 2 or did not take Step 2 by mid-September, your application may not have been reviewed at all. The average Step 2 score for matched U.S. MD graduates was 247 in the 2022 Match.<sup>1</sup> Substantially lower scores are likely a barrier to getting interviews. Unfortunately, it is difficult to overcome this hurdle — the one method that can prove clinical acumen is to do well on additional rotations. Meet with your medical school dean early to decide whether you can modify your schedule to get more EM rotations in before you graduate to assist with reapplication efforts. You may also consider delaying medical school graduation to do more rotations (and thus get more SLOEs for a reapplication).
- **ERAS Application:** Red flags on the ERAS application include felony convictions, a lack of involvement in any activities, misleading statements about activities, or leaves of absence without explanations.<sup>2</sup>
- **Personal Statement:** This rarely makes a substantial difference, but grammatical errors, a statement shorter than three-quarters of a page, or inappropriate comments in your personal statement all can serve as barriers to getting an interview. Additionally, if you have a known red flag in your application, the personal statement should address this and explain why it will not interfere with your career as an EM physician.
- **LoRs (including SLOEs):** This could be a blindside reason for not matching. SLOEs with comments such as “disinterested” or “confrontational” are barriers to matching. However, students are not able to see their SLOEs, so how can you know if a LoR or a SLOE is what caused you to not match? SLOEs are reflective of grades and comments received during a rotation, so low scores or less than enthusiastic comments are indications that a specific SLOE might include red flags.<sup>3</sup> Consider whether you need to obtain an additional, stronger letter so programs are not influenced by that letter’s impression of you.
- **MSPE:** Most medical schools allow you to see your MSPE. The significant red flags within an MSPE are either professionalism concerns, taking time off, negative comments from clinical rotations, or low quartile ranking.

Professionalism issues must be addressed in a personal statement, as they remain the largest red flag in an application. As MSPEs are finalized and follow you, other elements of the application must address any MSPE deficiencies.

- **Program Signals and Geographic Preferences:** If you did not submit program signals and/or geographic preferences, you may have put yourself at a disadvantage. If you sent program signals, the programs you chose may not have been the right tier of programs for your academic profile. Going forward you should use EMRA Match, T-STAR (only available through your dean of student affairs), and the AAMC's Residency Explorer™ Tool to assure you do not signal to programs that might not match your level of competitiveness.

## Assessing Your Match List

Once you have assessed your application, the next area to explore as a reason for not matching is your actual list of programs. Sit down with your program application list and carefully evaluate program type and number. Did you apply to programs that you are competitive for and an appropriate number? Did you apply to a good mix of reach and safety programs? If you had red flags, did you apply to places that will focus on your positive attributes? Applications such as EMRA Match, T-STAR (only available through your Student Affairs Dean), and the AAMC's Residency Explorer™ Tool can help you organize the programs you applied to and assess the appropriateness of your status as an applicant. Reach out to an experienced EM advisor for additional support. Ideally, this should be done before your application is completed, but it can be helpful retrospectively as well, particularly if you reapply to EM.

For your rank list, the primary question is if you ranked enough programs (see **Chapter 11: Preparing and Submitting Your Rank List** for details). Ranking at least 11-12 programs as a U.S. senior medical student gives you a > 95% chance of matching.

## What Are My Options?

There are several paths you can take from this point. The most immediately available is participating in the SOAP, which is done the same week as Match Day. Historically, matching into EM via SOAP was extremely unlikely. In 2017, 99.7% of the 2,047 spots were filled; this left six spots open. In 2016, there was one spot open.<sup>2</sup> However, in 2022, there were 219 positions available in the SOAP,<sup>1</sup> and that number doubled in 2023. It is too early to know if an increased number of open EM positions will be an ongoing trend, but if any EM spots are open, you should pursue them through the SOAP. If EM positions in the SOAP

are scarce, then the decision you'll need to make is whether to try to SOAP into a one-year preliminary ("prelim") position and then reapply to EM, choose another specialty to SOAP into, or do a non-clinical year and reapply to EM. Read more about the SOAP below, or skip ahead to other options.

## SOAP

The SOAP occurs during Match Week to match unfilled spots with unmatched applicants. This is facilitated via ERAS and is a binding contract, just like the standard Match.

You find out on Monday of Match Week at 10 a.m. ET whether you matched. An electronic list of unfilled programs that are participating in the SOAP is also available at that time. If you did not match, then at 11 a.m. ET Monday you can begin applying to programs in any unfilled specialty. Typically, programs offer video interviews to applicants they are considering. Programs can begin seeing applications on Tuesday at 8 a.m. ET, so you need to be available for potential interviews starting Tuesday morning. It is against NRMP rules for you (or any advisors acting on your behalf) to contact program directors of unfilled spots until the program has contacted you first.

Four rounds of offers are made — starting in 2023, all of the rounds occur on Thursday, starting at 9 a.m. ET. Because all offer rounds occur on the same day, the likelihood of programs offering additional interviews between rounds is almost zero, so you should use all your program spots in the initial SOAP application on Monday. If you receive an offer, you have two hours to accept or reject it. Once the SOAP rounds are completed, all remaining open spots will be listed. At that point, students can contact programs directly.

**Military Match:** Available Military spots will be published on MODS.

## Other Options?

Occasionally there may be a new residency in EM that receives approval after the NRMP process, and students who have not matched at first or through SOAP are eligible to contact those sites directly. An EM advisor actively involved in the application process should know if they exist and can direct you to them. Also, scour the web and community groups for more information (Twitter, CORD, EMRA, etc.).

If you decide to do a prelim year of post-graduate training in another specialty, make sure you go to an academic institution with an EM residency program. Secure an early rotation in the ED so they can advocate for you and write a LoR/eSLOE for your reapplication. If you are open and honest with the program leadership about your situation, you'll find many people willing to help guide

you to success. A 2018 survey of program leaders showed most believe the best use of time is to SOAP into a prelim year (if no categorical EM positions are available) and reapply the following year.<sup>4</sup> Further, they preferred the applicant perform the prelim year in a surgical or medicine department.

Non-clinical choices include obtaining an MPH or MBA, performing a research year, extending medical school to a 5th year, or obtaining some other type of graduate degree. These are all reasonable options, but be ready to explain how this better prepared you when you reapply to EM. Choosing one of these paths does allow you to apply for positions that become available after the Match (assuming you have not chosen an option with a binding contract). If you choose to do research, do so with an emergency physician if possible. If you choose another non-clinical route, find ways to stay involved with the EM program in your facility. To get another eSLOE prior to graduation, you can consider completing another EM rotation in the months just before graduation.

In the past, applicants have decided on a different specialty, such as internal medicine or family medicine, and then worked in the ED after graduation. These positions are sometimes available in more rural areas and may be an option for those who want to work in a less acute urgent care setting, but they are typically **not** an effective pathway to the independent practice of EM.

**Military Match:** Military applicants who do not match typically enter a transitional year or a GMO (general medical officer) assignment. In general, it is harder to match into EM out of a transitional year than a GMO assignment after not matching.

## Reapplication

**Reapplying for residency is a red flag** for many programs. The fact you are reapplying cannot be hidden, and you have very little time before the next application cycle begins. Be honest about your deficiencies, and address the ones that are possible to alter. You cannot change your Step 1/Level 1 or Step 2 scores or grades on your transcript. You cannot change any possible felonies or other red flags. You can, however, prove your work ethic, add a stronger eSLOE, show your dedication to the field, gain additional clinical experience and skills, and make more contacts through conferences, social media, presenting research, etc.

**If you think an eSLOE from your previous year** may have prevented you from matching, choose which letters to resubmit with your new application. Even if you do ask that an eSLOE be resubmitted, sit down with the letter writer, try to show what you have done to improve yourself, and they might revise the

eSLOE accordingly. Consider completing additional EM rotations before you graduate to obtain new eSLOEs that are more supportive. If these new eSLOEs are supportive they will help your application more than one or more less supportive original eSLOE(s).

**If your interview skills are not strong**, practice. Find friends and advisors to give you frank commentary on those skills.

**If you have matched into a categorical residency**, you need your PD's permission and LoR for reapplication. Also, if you are in a non-EM categorical residency position and then decide to reapply, some places will not be able to interview you because of funding issues. The government assigns funding based on your first categorical match in a particular specialty for a certain number of years, which can often create a shortfall because of the difference in lengths of residencies. For example, if you matched into a 3-year non-EM categorical residency position, there will be a lack of funding if you switch to a categorical EM residency position, as you will only have two (or less) years of funding left. However, if you initially match into a 4- or 5-year categorical in a different specialty and are reapplying, the government will provide funding for the number of categorical years you would have had remaining. Of note, prelim years do not count against this funding.

**The LoR from your PD if you are in a clinical year** (eg, prelim surgery or medicine) can address changes in your clinical abilities and work ethic. It is important to note that you will have only worked with them for a couple of months by this point, so their LoR may not be as influential as EM PDs' letters. If in a categorical program, talk to your PD and see if you can schedule an EM rotation early to get a strong, EM-focused letter.

If you decide to reapply, you need to understand your chances are certainly not universally better. You may improve your chances at a few places that now know you better or are willing to meet you, but statistically, your chances of matching into EM are diminished. In the 2020 NRMP PD survey, 56% of program directors indicated they never interview or rank prior medical school graduates, and approximately 41% responded they seldom do.<sup>4</sup> Even interviewing itself is more challenging if you are in a clinical year and need to find creative ways to get time off. A broad application strategy and a backup plan are even more crucial because a second reapplication to EM is even less likely to be successful.

### Step 3/Level 3

One other thing to consider is using the time between the next application cycle to take your USMLE Step 3 or COMLEX Level 3 exam. This will not only make your first year as a resident easier but will show PDs you are committed to the field and remove a potential barrier to succeeding in the future.



## THE BOTTOM LINE

- ✓ The most important step to take if you don't match is to find an advisor well-versed in EM application/reapplication. Sit and talk through your application to identify what likely contributed to you not matching and to construct a personalized strategy to move forward.
- ✓ The SOAP allows you to apply for open spots within EM for this Match (if available). You can also choose to apply to another specialty or for a preliminary position during the SOAP.
- ✓ There are multiple approaches to reapplication in EM, including extending medical school, pursuing a year of clinical training in another specialty (prelim or categorical), and completing an additional degree. Each of these has advantages and disadvantages.

## References

### Chapter 1: Choosing Emergency Medicine

1. American College of Emergency Physicians. Joint statement on the 2022 emergency medicine residency match. Retrieved December 27, 2022, from <https://www.acep.org/news/acep-newsroom-articles/joint-statement-match-2022/>
2. American College of Emergency Physicians. 50 years of EM. 2018. <https://www.acep.org/who-we-are/50Years/#sm.00001312yigawe6swlw7tv3igj0j>. Accessed October 22, 2018.
3. Marcozzi D, Carr B, Liferidge A, Baehr N, Browne B. Trends in the Contribution of Emergency Departments to the Provision of Hospital-Associated Health Care in the USA. *Int J Health Serv*. 2018;48(2):267–288.
4. Augustine JJ. Long-Term Trends in Emergency Department Visits, Patient Care Highlighted in National Reports. *ACEP Now*. January 11, 2017.
5. Morganti KG, Bauhoff S, Blanchard JC, et al. The Evolving Role of Emergency Departments in the United States. RAND Health. 2013.
6. Lin MP, Baker O, Richardson LD, Schuur JD. Trends in Emergency Department Visits and Admission Rates Among US Acute Care Hospitals. *JAMA Intern Med*. 2018;178(12):1708–1710.
7. Lex J. EM Mindset — Joe Lex — Thinking Like An Emergency Physician. emDocs. July 11, 2016. [http://www.emdocs.net/em-mindset-joe-lex-thinking-like-an-emergency-physician/#\\_edn7](http://www.emdocs.net/em-mindset-joe-lex-thinking-like-an-emergency-physician/#_edn7). Accessed October 22, 2018.
8. Maslach C, Leiter MP. Understanding the burnout experience: recent research and its implications for psychiatry. *World Psychiatry*. 2016;15(2):103–111.
9. Shanafelt TD, Boone S, Tan L, et al. Burnout and satisfaction with work-life balance among US physicians relative to the general US population. *Arch Intern Med*. 2012;172(18):1377–1385.
10. Stehman CR, Testo Z, Gershaw RS, Kellogg AR. Burnout, Drop Out, Suicide: Physician Loss in Emergency Medicine, Part I. *West J Emerg Med*. 2019;20(3):485–494.
11. Dr. Lorna Breen Health Care Provider Protection Act. H.R. 1667, 117<sup>th</sup> Cong., 1<sup>st</sup> session (2021).
12. Dyrbye LN, Burke SE, Hardeman RR, et al. Association of Clinical Specialty With Symptoms of Burnout and Career Choice Regret Among US Resident Physicians. *JAMA*. 2018;320(11):1114–1130.
13. Nguyen J, Lui A, McKenney M, Liu H, Ang D, Elkbuli A. Impacts and challenges of the COVID-19 pandemic on emergency medicine physicians in the United States. *Am J Emerg Med*. 2021;48:38–47.
14. AAMC. Careers in medicine. Retrieved December 27, 2022.
15. Emergency Medicine Residents' Association. EMRA Fellowship Guide. Retrieved December 27, 2022.

### Chapter 2: The Preclinical Years

1. National Resident Matching Program. Charting Outcomes in the Match: Senior Students of U.S. MD Medical Schools. July 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022_Final.pdf).
2. CORD Advising Students Committee for Emergency Medicine. Emergency Medicine Medical Student Planner. 2018. [https://www.cordem.org/globalassets/files/committees/student-advising/\\_2018-satf-general-medical-student-planner.docx.pdf?usp=sharing](https://www.cordem.org/globalassets/files/committees/student-advising/_2018-satf-general-medical-student-planner.docx.pdf?usp=sharing).
3. Emergency Medicine Residents' Association. Student-Resident Mentorship Program. <https://www.emra.org/students/advising-resources/student-resident-mentorship-program/>.
4. National Resident Matching Program. Charting Outcomes in the Match: Senior Students of U.S. DO Medical Schools, July 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-DO-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-DO-Seniors-2022_Final.pdf).
5. National Resident Matching Program. Charting Outcomes in the Match: International Medical Graduates, 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-IMG-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-IMG-2022_Final.pdf).
6. National Resident Matching Program Data Release and Research Committee. Results of the 2021 NRMP Program Director Survey. <https://www.nrmp.org/wp-content/uploads/2021/11/2021-PD-Survey-Report-for-WWW.pdf>.
7. Step 1 Common Questions. USMLE. <https://www.usmle.org/common-questions/step-1>.
8. Jacobparayil A, Ali H, Pomeroy B, et al. Predictors of Performance on the United States Medical Licensing Examination Step 2 Clinical Knowledge: A Systematic Literature Review. *Cureus*. 2022;14(2):e22280.
9. Giordano C, Hutchinson D, Peppler R. A Predictive Model for USMLE Step 1 Scores. *Cureus*. 2016;8(9):e769.
10. Nikolla D A, Jaqua B M, Tuggle T, et al. Differences Between Emergency Medicine Residency Programs That Accept the Comprehensive Osteopathic Medical Licensing Examination of the United States and Those That Prefer or Only Accept the United States Medical Licensing Examination. *Cureus*. 2022;14(2):e22704.
11. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train*. 2018;2(2):146–153.
12. Murphy B. DO and MD Licensing Exams Should Be Viewed Equally, Says AMA. American Medical Association, 14 Nov. 2018. [www.ama-assn.org/residents-students/match/do-and-md-licensing-exams-should-be-viewed-equally-says-ama](http://www.ama-assn.org/residents-students/match/do-and-md-licensing-exams-should-be-viewed-equally-says-ama).
13. Pelletier-Bui AE, Schrepel C, Smith L, et al. Advising special population emergency medicine residency applicants: a survey of emergency medicine advisors and residency program leadership. *BMC Med Educ*. 2020;20(1):495.

### Chapter 3: Third Year and Planning for Fourth

1. National Resident Matching Program Data Release and Research Committee. Results of the 2021 NRMP Program Director Survey. <https://www.nrmp.org/wp-content/uploads/2021/11/2021-PD-Survey-Report-for-WWW.pdf>.
2. Bhat R, Takenaka K, Levine B, et al. Predictors of a Top Performer During Emergency Medicine Residency. *J Emerg Med*. 2015;49(4):505–512.

3. Breyer MJ, Sadosty A, Biros M. Factors Affecting Candidate Placement on an Emergency Medicine Residency Program's Rank Order. *West J Emerg Med.* 2012;13(6):458-462.
4. Pelletier-Bui AE, Schrepel C, Smith L, Zhang XC, Kellogg A, Edens MA, Jones CW, Hillman E. Advising special population emergency medicine residency applicants: a survey of emergency medicine advisors and residency program leadership. *BMC Med Educ.* 2020;20(1):495.
5. Emergency Medicine Residents' Association. EMRA Match. <https://webapps.acep.org/utlils/spa/match#/search/map>. Accessed August 20, 2018.
6. King K, Kass K. What do they want from us? A survey of EM program directors on EM application criteria. *West J Emerg Med.* 2017;18(1):126-128.
7. Harmouche E, Goyal N, Pinawin A, Nagarwala J, Bhat R. USMLE Scores Predict Success in ABEM Initial Certification: A Multicenter Study. *West J Emerg Med.* 2017 Apr;18(3):544-549.
8. National Resident Matching Program. Charting Outcomes in the Match: Senior Students of U.S. MD Medical Schools, 3rd ed. July 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022_Final.pdf)
9. Lee AS, Chang L, Feng E, Helf S. Reliability and Validity of Conversion Formulas Between Comprehensive Osteopathic Medical Licensing Examination of the United States Level 1 and United States Medical Licensing Examination Step 1. *J Grad Med Educ.* 2014;6(2):280-283.
10. Sarko J, Svoren E, Katz E. COMLEX-1 and USMLE-1 Are Not Interchangeable Examinations. *Acad Emerg Med.* 2010;17(2):218-220.
11. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train.* 2018;2(2):146-153.
12. Love JN, Smith J, Weizberg M, et al. Council of Emergency Medicine Residency Directors' Standardized Letter of Recommendation: The Program Director's Perspective. *Acad Emerg Med.* 2014;21(6):680-687.
13. United States Medical Licensing Examination. Who is Eligible to Take the USMLE Steps? . usmle.org. <https://www.usmle.org/bulletin-information/eligibility>. Accessed Sept 18, 2022.
14. National Resident Matching Program Data Release and Research Committee. Results of the 2020 NRMP Program Director Survey. <https://www.nrmp.org/wp-content/uploads/2022/01/2020-PD-Survey.pdf>.

## Chapter 4: Finding Your Fit

1. Jarou Z, Ochsenbein S, Franzen D, Fairbrother H, Kellogg A. CORD Research Abstracts 2016: Do Students Have Access to the Data They Desire When Selecting an Emergency Medicine Residency Program? *West J Emerg Med.* 2016; 17:S10-11.
2. Emergency Medicine Residents' Association. EMRA Match. <https://webapps.acep.org/utlils/spa/match#/search/map>.
3. National Resident Matching Program. Results of the 2017 NRMP Applicant Survey. <http://www.nrmp.org/wp-content/uploads/2017/09/Applicant-Survey-Report-2017.pdf>.
4. National Resident Matching Program. Data Release and Research Committee: Results of the 2022 NRMP Applicant Survey. Washington, DC. 2022.
5. Koehler TJ, Goodfellow J, Davis AT, Spybrook J, vanSchagen JE, Schuh L. Predicting In-State Workforce Retention After Graduate Medical Education Training. *J Grad Med Educ.* 2017;9(1):73-78.
6. Kukulski P, Goode D, McEvoy B, Hay S, Ahn J. (2020). Geographic Trends in the Emergency Medicine Match. *West J Emerg Med.* 2020;21(4):S19.
7. Gottlieb M, Arno K, Kuhns M, Chan TM. Distribution of Clinical Rotations Among Emergency Medicine Residency Programs in the United States. *Acad Emerg Med.* 2018;2(4):288-292.
8. Accreditation Council for Graduate Medical Education (ACGME). ACGME Program Requirements for Graduate Medical Education in Emergency Medicine. 2022.
9. Fortenberry K, Knox J, Van Hala S. What Do Residents Want for Burnout Prevention? ... Time. *Acad Med.* 2018;93(3):343-344.
10. Roberts R. Medscape Residents Salary & Debt Report 2022. Published July 29, 2022.
11. Geyer BC, Kaji AH, Katz ED, Jones AE, Beberta VS. A National Evaluation of the Scholarly Activity Requirement in Residency Programs: A Survey of Emergency Medicine Program Directors. *Acad Emerg Med.* 2015;22(11):1337-1344.
12. Accreditation Council for Graduate Medical Education (ACGME). Specialty-Specific Program Requirements: Resident/Fellow Scholarly Activity. ACGME. 2022.
13. Jordan J, Hwang M, Kaji AH, Coates WC. Scholarly Tracks in Emergency Medicine Residency Programs Are Associated with Increased Choice of Academic Career. *West J Emerg Med.* 2018;19(3).
14. EM Coalition. Letter to Nate Gross, MD, Doximity. <https://www.cordem.org/globalassets/files/board/adv.-position-statements/doximity-letter.pdf>. Sept. 12, 2014.
15. CORD Abstracts 2015. Effect of Doximity Residency Rankings on Residency Applicants' Program Choices. *West J Emerg Med.* 2015;16(6):889-893.
16. Peterson WJ, Hopson LR, Khandelwal S, et al. Impact of Doximity Residency Rankings on Emergency Medicine Applicant Rank Lists. *West J Emerg Med.* 2016;17(3):350-354.

## Chapter 5: Applying for Away Rotations

1. National Resident Matching Program, Data Release and Research Committee. Results of the 2021 NRMP Program Director Survey. <https://www.nrmp.org/wp-content/uploads/2021/11/2021-PD-Survey-Report-for-WWW.pdf>
2. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train.* 2018;2(2):146-153.

3. Wilson D, Laotepitaks C, Chandra S. A comparison of standardized letters of evaluation for emergency medicine residency applicants. *West J Emerg Med.* 2020;22(1):20-25. doi:10.5811/westjem.2020.12.49086.
4. Boysen-Osborn M, Andrusaitis J, Clark C, et al. A Retrospective Cohort Study of the Effect of Home Institution on Emergency Medicine Standardized Letters of Evaluation. *AEM Educ Train.* 2019;3(4):340-346. Published 2019 Jul 30. doi:10.1002/aet2.10374.
5. King K, Kass K. What do they want from us? A survey of EM program directors on EM application criteria. *West J Emerg Med.* 2017;18(1):126-128.
6. Emergency Medicine Residents' Association. EMRA Match. <https://webapps.emra.org/utis/spa/match#/search/map>. Accessed January 2, 2023.
7. Council of Emergency Medicine Residency Directors Student Advising Task Force. (2018). [CORD SATF Advising Addenda Study]. Unpublished raw data.
8. National Resident Matching Program. Results of the 2017 NRMP Applicant Survey by Preferred Specialty and Applicant Type. <http://www.nrmp.org/wp-content/uploads/2017/09/Applicant-Survey-Report-2017.pdf>.
9. Explore URIM opportunities for visiting students. Students & Residents. <https://students-residents.aamc.org/students/explore-urim-opportunities-visiting-students>. Accessed January 17, 2023. Diversity oriented away/scholarship programs. Apply for Away Rotations. <https://www.emra.org/students/advising-resources/apply-for-away-rotations/diversity-oriented-scholarship-programs/>. Accessed January 17, 2023.
10. SAEM. Underrepresented minority scholarships. SAEM.org. <https://www.saem.org/about-saem/academies-interest-groups-affiliates2/cdem/for-students/underrepresented-minority-scholarships>. Accessed January 17, 2023.
11. CORD. DEI Rotation Scholarships. <https://www.cordem.org/resources/professional-development/diversity-program-listings/dei-rotation-scholarships/>. Accessed March 16, 2023.
12. Stobart M, O'Connell A. Medical Education Accreditation System: Evaluating Factors for Match Success in Emergency Medicine. *West J Emerg Med.* 2018;19(5). <https://escholarship.org/uc/item/9cc5n9z1> Accessed January 15, 2023.
13. Zhang XC, Gordon D, Lutfy-Clayton L, et al. Away rotation applications in emergency medicine: Medical student behaviors, outcomes, and stressors. *J Emerg Med.* 2022;62(3):401-412.

## Chapter 6: Crush Your Clerkships, Secure Your SLOEs

1. Chinai SA, Guth T, Lovell E, Epter M. Taking Advantage of the Teachable Moment: A Review of Learner-Centered Clinical Teaching Models. *West J Emerg Med.* 2018;19(1):28-34.
2. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train.* 2018;2(2):146-153.
3. Lutfy-Clayton L, Morrissey T, Pelletier-Bui A, et al. The Emergency Medicine Applying Guide. Council of Emergency Medicine Residency Directors Advising Students Committee in Emergency Medicine. 2018.
4. Jung J, Franzen D, Lawson L, et al. The National Clinical Assessment Tool for Medical Students in the Emergency Department (NCAT-EM). *West J Emerg Med.* 2018;19(1):66-74.

## Chapter 7: Building Your ResidencyCAS Application (2025 update)

1. Liaison International. ResidencyCAS Centralized Application Service. 2025. <https://www.residencycas.com/>
2. Council of Residency Directors in Emergency Medicine. Emergency Medicine Collaboration with ResidencyCAS. 2025. <https://www.cordem.org/resources/upcoming-changes-in-em/em-collab-with-residencycas>
3. Liaison International. ResidencyCAS Applicant Help Center. 2025. [https://help.liaisonedu.com/ResidencyCAS\\_Applicant\\_Help\\_Center](https://help.liaisonedu.com/ResidencyCAS_Applicant_Help_Center)
4. King K, Kass K. What do they want from us? A survey of EM program directors on EM application criteria. *West J Emerg Med.* 2017;18(1):126-128.
5. Council of Emergency Medicine Residency Directors Advising Students Committee in Emergency Medicine. (2018). [CORD ASC-EM Advising Addenda Study]. Unpublished raw data.
6. National Resident Matching Program. Charting Outcomes: Program Director Survey Results, 2024 Main Residency Match. August 8, 2024. <https://www.nrmp.org/match-data/2024/08/charting-outcomes-program-director-survey-results-main-residency-match/>
7. Emergency Medicine Residents' Association. EMRA Match. <https://www.match.emra.org/>
8. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train.* 2018;2(2):146-153.
9. Olson DP, Oatts JT, Fields BG, Huot SJ. The residency application abyss: insights and advice. *Yale J Biol Med.* 2011;84(3):195-202.
10. Graves AJ, Brown BM, Oller KL. To the Editor: Using the Personal Statement to Address Application Deficiencies. *J Grad Med Educ.* 2022;14(5):621.
11. Hillman E, Lutfy-Clayton L, Desai S, Kellogg A, Zhang XC, Hu K, Hess J. Student-Advising Recommendations from the Council of Residency Directors Student Advising Task Force. *West J Emerg Med.* 2017;18(1):93-96.
12. Love JN, Smith J, Weizberg M, et al. Council of Emergency Medicine Residency Directors' Standardized Letter of Recommendation: The Program Director's Perspective. *Acad Emerg Med.* 2014;21(6):680-687.
13. Council of Residency Directors in Emergency Medicine. CORD Standardized Letter of Evaluation. <https://www.cordem.org/resources/sloe>
14. Council of Residency Directors in Emergency Medicine, Advising Students Committee in EM. How to Get an Away Rotation Guide. <https://www.cordem.org/siteassets/files/committees/student-advising/vsas-document-1.pdf>
15. Pelletier-Bui A, Fallon T, Smith L, et al. Program signaling in emergency medicine: The 2022-2023 program director experience. *West J Emerg Med.* 2024;25(5):715-724. doi:10.5811/westjem.19392

16. Exploring the Relationship Between Program Signaling and Interview Invitations Across Specialties. Association of American Medical Colleges. December 2, 2024. <https://www.aamc.org/media/81251/download?attachment>

## Chapter 8: Apply Smarter Smarter – Understand Your Competitiveness

1. Love JN, Smith J, Weizberg M, et al. Council of Emergency Medicine Residency Directors' Standardized Letter of Recommendation: The Program Director's Perspective. *Acad Emerg Med*. 2014;21(6):680-687.
2. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. + 2018;2(2):146-153.
3. National Resident Matching Program, Data Release and Research Committee: Results of the 2022 NRMP Program Director Survey. National Resident Matching Program, Washington, DC. 2022. Accessed September 29, 2022. [https://www.nrmp.org/wp-content/uploads/2022/09/PD-Survey-Report-2022\\_FINALrev.pdf](https://www.nrmp.org/wp-content/uploads/2022/09/PD-Survey-Report-2022_FINALrev.pdf)
4. Harmouche E, Goyal N, Pinawin A, Nagarwala J, Bhat R. USMLE Scores Predict Success in ABEM Initial Certification: A Multicenter Study. *West J Emerg Med*. 2017;18(3):544-549.
5. National Resident Matching Program. Results and Data: 2022 Main Residency Match®. [https://www.nrmp.org/wp-content/uploads/2022/05/2022-Main-Match-Results-and-Data\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/05/2022-Main-Match-Results-and-Data_Final.pdf)
6. National Resident Matching Program, Data Release and Research Committee: Results of the 2021 NRMP Program Director Survey. National Resident Matching Program, Washington, DC. Accessed on Sept 20, 2022 at <https://www.nrmp.org/wp-content/uploads/2021/11/2021-PD-Survey-Report-for-WWW.pdf>
7. National Resident Matching Program. Charting Outcomes in the Match: Senior Students of U.S. Osteopathic Medical Schools, 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-DO-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-DO-Seniors-2022_Final.pdf)
8. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train*. 2018;2(2):146-153.
9. National Resident Matching Program. Charting Outcomes in the Match: U.S. Allopathic Seniors. July 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022_Final.pdf)
10. Pelletier-Bui AE, Schrepel C, Smith L, et al. Advising special population emergency medicine residency applicants: a survey of emergency medicine advisors and residency program leadership. *BMC Med Educ*. 2020;20(1):495. Published 2020 Dec 7. doi:10.1186/s12909-020-02415-8
11. Boysen-Osborn M, Andrusaitis J, Clark C, et al. A Retrospective Cohort Study of the Effect of Home Institution on Emergency Medicine Standardized Letters of Evaluation. *AEM Educ Train*. 2019;3(4):340-346. Published 2019 Jul 30. doi:10.1002/aetd.10374
12. Emergency Medicine Residents' Association. EMRA Match. <https://webapps.acep.org/utis/spa/match#/search/map>. Accessed Aug. 8, 2022.
13. National Resident Matching Program, Charting Outcomes in the Match: Senior Students of U.S. Medical Schools, 2022. National Resident Matching Program, Washington, DC 2022. Accessed Oct. 27, 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022_Final.pdf)
14. AAMC. ERAS Statistics: ERAS 2023 Preliminary Residency Data. <https://www.aamc.org/data-reports/interactive-data/eras-statistics-data>. Accessed Jan. 8, 2022

## Chapter 9: Interview Season Logistics

1. National Resident Matching Program, Data Release and Research Committee: Results of the 2021 NRMP Program Director Survey. National Resident Matching Program, Washington, DC. 2021. <https://www.nrmp.org/wp-content/uploads/2021/11/2021-PD-Survey-Report-for-WWW.pdf>.
2. National Resident Matching Program. Charting Outcomes in the Match: Senior Students of U.S. MD Medical Schools. July 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022_Final.pdf).
3. National Resident Matching Program. Charting Outcomes in the Match: Senior Students of U.S. DO Medical Schools. July 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting\\_Outcomes\\_DO\\_Seniors\\_2022\\_Final-Updated.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting_Outcomes_DO_Seniors_2022_Final-Updated.pdf).
4. National Resident Matching Program. Charting Outcomes in the Match: International Medical Graduates. July 2022. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-IMG-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-IMG-2022_Final.pdf).
5. National Resident Matching Program, Data Release and Research Committee: Results of the 2020 NRMP Program Director Survey. National Resident Matching Program, Washington, DC. 2020. <https://www.nrmp.org/wp-content/uploads/2022/01/2020-PD-Survey.pdf>
6. Match Participation Agreement Program: 2023 Main Residency Match and Supplemental Offer and Acceptance Program (SOAP). Violations. <https://www.nrmp.org/wp-content/uploads/2022/09/2023-MPA-Main-Match-Program-FINAL-3.pdf>
7. Domingo A, Rdesinski RE, Stenson A, et al. Virtual residency interviews: Applicant perceptions regarding virtual interview effectiveness, advantages, and barriers. *Journal of Graduate Medical Education*. 2022;14(2):224-228.

## Chapter 10: Making the Most of Interview Day

1. Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train*. 2018;2(2):146-153.
2. Garmel G. Residency Interview Guide for Med Students. EMRA. <https://www.emra.org/embark/medical-students/interview-prep/residency-interview-guide-for-med-students/>. Published September 27, 2022. Accessed January 25, 2023.

- Love JN, Howell JM, Hegarty CB, et al. Factors that influence medical student selection of an emergency medicine residency program: implications for training programs. *Acad Emerg Med*. 2012;19(4):455-460.
- Domingo A, Rdesinski RE, Stenson A, Aylor M, Sullenbarger J, Hatfield J, Walker S, Hervey S, Singer J, Cois A, Cheng A. Virtual Residency Interviews: Applicant Perceptions Regarding Virtual Interview Effectiveness, Advantages, and Barriers. *J Grad Med Educ*. 2022 Apr;14(2):224-228. doi: 10.4300/JGME-D-21-00675.1. Epub 2022 Apr 14. PMID: 35463161; PMCID: PMC9017272.++
- Vadi MG et al. Comparison of web-based and face-to-face interviews for application to an anesthesiology training program: a pilot study. *Int J of Med Ed*. 2016;7:102-108.
- National Resident Matching Program. Match Communication Code of Conduct. <https://www.nrmp.org/intro-to-the-match/the-match-agreement/match-codes-of-conduct/>. Accessed October 5, 2022.

## Chapter 11: Preparing and Submitting Your Rank List

- Medium. How Long Does the Residency Match Algorithm Take to Run? 2015. <https://medium.com/@vishnuravi/how-long-does-the-residency-match-algorithm-take-to-run-c38c06cd4d57>.
- National Resident Matching Program. Results and Data: 2022 Main Residency Match. 2022. [https://www.nrmp.org/wp-content/uploads/2022/05/2022-Main-Match-Results-and-Data\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/05/2022-Main-Match-Results-and-Data_Final.pdf).
- National Resident Matching Program. Interactive Charting Outcomes in the Match. <http://www.nrmp.org/interactive-chartingoutcomes-in-the-match/>.
- National Resident Matching Program. Ranking Residency Programs. <http://www.nrmp.org/ranking-residency-programs/>.

## Chapter 12: What If I Don't Match?

- Charting Outcomes in the Match: Senior Students of U.S. MD Medical Schools Characteristics of U.S. MD Seniors Who Matched to Their Preferred Specialty in the 2022 Main Residency Match SAP Crystal Reports. [https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022\\_Final.pdf](https://www.nrmp.org/wp-content/uploads/2022/07/Charting-Outcomes-MD-Seniors-2022_Final.pdf) Accessed January 20, 2023.
- Liang M, Curtin LS, Signer MM, Savoia MC. Unmatched U.S. Allopathic Seniors in the 2015 Main Residency Match: A Study of Applicant Behavior, Interview Selection, and Match Outcome. *Acad Med*. 2017;92(7):991-997.
- Negaard M, Assimacopoulos E, Harland K, Van Heukelom J. Emergency Medicine Residency Selection Criteria: An Update and Comparison. *AEM Educ Train*. 2018;2(2):146-153.
- Results of the 2020 NRMP Program Director Survey SAP Crystal Reports - (nrmp.org).

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- Erin Karl, MD, MEHP

